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APPENDIX I – MULTI-TIER PRICING SPECIFICATION

I.1   MARKUPS

I.1.1   Definition of Item Level Markups

Item Level Markups are defined for a specified item. For each item, three price markups can be defined:

- Main Markup
- Freight Markup
- Other Markup

Item level markups are expressed as a factor of the base price of the item. Item level markups are optional. Item level markups override class level and shopper group level markups when calculating the selling price of the item. Item level markups are defined for a product view and apply only to that product view.

I.1.2   Definition of Class Level Markups

Class Level Markups are defined for a specified class. Markups specified at the Class level are applied to all items that are associated with the class and to all sub classes. For each class, three price markups can be defined:

- Main Markup
- Freight Markup
- Other Markup

Class level markups are expressed as a factor of the base price of the item. Class level markups are optional. Class level markups override shopper group markups. Class level markups are defined for a product view and apply only to that product view.

I.1.3   Definition of Shopper Group Level Markups

Shopper Group Level Markups are defined for a specified user group that has Navigator (Catalog Browser WEB application) as an authorized function. For each user group, three price markups can be defined:

- Main Markup

- Freight Markup

- Other Markup

Shopper group level markups are expressed as a factor of the base price of the item. Shopper group level markups are optional.

I.1.4 Option Settings for Price Markups

In a user group definition, the user can switch "off" Freight and/or Other Price Markup. This results in exclusion of the markups (at any level - Item/Class/Shopper Group) for the marked-up price calculation for that user group.

For example, if the "Other" markup has been "switched off" then it would not be considered for calculation at any level (Item/Class/Shopper Group).

If the user does not enter a markup it is defaulted to zero.

I.1.5 Definition of Quantity Based Pricing

Quantity based pricing are alternative basic prices for an item. They are defined for an item in a product view and are applicable only for that product view. Quantity based price breakups are applicable during a specified period of time. They can also be set without a time limit. The user enters price breakup for each desired quantity range for the item.

I.1.6 Definition of Promotional Pricing

Promotional price is and alternative basic price for an item. Promotional prices are applicable during a specified period of time. Promotional price overrides quantity based pricing of an item. The user enters the promotional price of the item in a product view, which is applicable only for that product view.

I.2   PRICE CALCULATIONS

I.2.1   Calculation of Marked Up Price

The system determines the markups for the item based upon the suggested priority. If an item level markup has been defined for the item, it will be used, otherwise the system searches for the class level markup and then the shopper group level markup.

After determining the markups, the system refers to the price markup option settings for the user group. If a markup has been "switched off" then it is not used in the calculation of the marked-up price.

The marked-up price of an item is calculated using the following formula:

Marked-up price per unit of an item = (Base Price * Main Markup) +

[(Base Price * Freight Markup)] + [(Base Price * Other Markup)]

Elements of the formula in square brackets are optional and depend upon the option settings for price markups.

The Price markup used for calculation would be based on the following priority:

Item Level ® Class Level ® Shopper Group

I.2.2 Calculation of Price based on Quantity-Based Price Breakups

The quantity-based price of an item is specific to a time period. After expiry of the period, marked-up pricing is used for the item. Quantity-based pricing can be defined without a time limit as well. The system picks up the price for the item based on the quantity entered by the user, if the current date falls within the date range specified while setting up the quantity based pricing for the item. This quantity-based price is used as the base price to arrive at the marked-up price. This calculated Quantity Marked-up price is displayed as the selling price of the item.

The formula used for calculation of Quantity pricing is:

Quantity Based Price per unit of an item = (Quantity Price * Main Markup) +

[(Quantity Price * Freight Markup)] + [(Quantity Price * Other Markup)]

Elements of the formula in square brackets are optional and depend upon the option settings for price markups.

The quantity-based prices as per the above calculations is displayed to the user in the product detail page. Based on the purchase quantity entered by the user, the total amount is calculated using the selling price applicable to the entered quantity.

I.2.3 Calculation of Promotional Price

Promotional price of an item is specific to a time period. After expiry of the period, quantity pricing or marked-up pricing is used for the item.

The system picks up the promotional price for the item if the current date falls within the date range specified while setting up the promotional price. This promotional price is used as the base price to arrive at the marked-up price. This calculated Promotional Marked-up price is displayed as the selling price of the item.

The formula used for calculation of Promotional pricing is:

Promotional Marked-up price = (Promotional Price * Main Markup) +

[(Promotional Price * Freight Markup)] + [(Promotional Price * Other Markup)]

Elements of the formula in square brackets are optional and depend upon the option settings for price markups.

(Note: FIG. 2 illustrates a flow chart for the determination of price and/or price breakups for an item.)

APPENDIX II – USER PROFILING

There are two types of users of the system and method of the present invention:

· <u>Users to Create and Manage Rich Content</u>: The "Define User Groups" and "Define Users" functions enable maintenance of this type of user. These users use the various available functions of present invention to create and manage rich content, i.e., CLG, Maintenance, Publishing etc. These users comprise Data Aggregators, Material Experts, Quality Assurance Personnel, Administrators, Approvers, etc.

Individual user groups access selected projects and selected user functions. An individual user is associated with a user group. The present invention site map for a user is generated based on the user's profile, i.e., authorizations defined for the user group to which the user belongs. This restricts a user to perform only those functions for which the user has authorization.

· <u>Shoppers who will browse published catalogs and purchase items</u>: The "Define User Groups" and "Define User" functions enable maintenance of this type of user. The users that are members of a User Group that has Navigator as an authorized function are shoppers. The shoppers browse published catalogs using the Catalog Browser Web Application and purchase available items.

A user (shopper) is associated with a user group. This enables similar shoppers to be grouped together. The user group is associated with different product views for distinct catalogs. A shopper is presented the product view associated with the user group for the selected catalog.

A shopper is not allowed to access any other functions of the present invention except Catalog Browser Web Application unless configured in the User Group. A log-on screen is available for shoppers. This log-on screen enables the shopper to specify the catalog, the user id and password. On submitting this information, the shopper is presented the Catalog Browser Web Application.

APPENDIX III – WORK PROCESS MANAGMENT

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Document Revised: September 16, 2002

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1 Introduction

1.1 Welcome to ContentPlus

ContentPlus, is a robust, easy-to-use rich content creation and management application that provides users with the ability to:

❑ Create a standard rich content database with referencing schema of classification.

❑ Maintain classification schema and items by addition, modification or deletion.

❑ Import classification schema and rich content data from different sources.

❑ Optimize Content and Product Views based on User Profiles and Shopper Groups.

❑ Manage Access Authorization and Security Levels for application and database.

1.2 System Requirements

ContentPlus is a web-based, browser-independent application. As a web-based application, ContentPlus requires the Java Runtime Environment (JRE), a standard browser and access to the Internet.

As a browser-independent application, ContentPlus can be accessed with a variety of standard browsers, including Microsoft Internet Explorer and Netscape Navigator. The following are the software and hardware requirements for using ContentPlus.

Software Requirements

❑ Java Runtime Environment v 1.4.0 or higher

❑ Internet Explorer v. 5.5 or higher
-OR-
Netscape Navigator v. 6.0 or higher

Hardware Requirements

❑ 800 x 600 pixels screen resolution

1.3 Contacting ePlus Content Services, Inc.

Refer to the following sections for information about contacting ePlus, inc. for customer support or sales information.

1.3.1 ePlus, Inc. Headquarters

ePlus, inc. is a leading provider of supply chain management solutions. From integrated financial services, to an end-to-end, web -based procurement application, to a comprehensive, web-based asset management application, to

unparalleled client services, ePlus, inc. provides its rapidly growing customer base complete supply chain management solutions.

Corporate Headquarters

Address

ePlus, inc.

400 Herndon Parkway

Herndon, VA 20170

Telephone

1-703-264-0770

    -or-

1-800-827-5711

Office Hours

Monday to Friday

9:00 A.M. to 5:30 P.M. Eastern Standard Time

2   Getting Started

2.1   Logging into ContentPlus

Your ContentPlus System Administrator provides you the Uniform Resource Locator (URL) of your organization's ContentPlus site along with your ContentPlus login name and password.

Your login information is used to verify your access permissions and to control the functions you can see and perform in ContentPlus.

Logging into ContentPlus is easy. After you access the ContentPlus Login page, simply enter your login name and password.

2.1.1   Logging into ContentPlus Site

1. Launch your browser software, and type the URL of your organization's ContentPlus site. The ContentPlus login page for your organizations' site appears.

2. From the ContentPlus login page, in the **User ID** field, enter your ContentPlus site user id.

3. Similarly, in the **Password** field, enter your site password. The password will be encrypted and therefore it will show as asterisk '*'.

4. Click on the **Login** button. The ContentPlus home page, which is the central screen of ContentPlus appears.

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2.1.2   The ContentPlus Home Page

Logging into the ContentPlus site displays the ContentPlus home page. The home page provides access to a range of functions available in the application.

Note: The navigation button viz. Back, Forward, Refresh, Home etc. present on the browser's toolbar must not be used for navigation. Always ensure that the navigation buttons provided on the application interface are used to navigate within the application.

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Click on this to view the context sensitive user documentation for the current screen

Click on this link to logout of the ContentPlus application. The login page will be displayed.

Click on this link to return to the home page from any screen within the application.

Provides context sensitive online help when the mouse pointer is moved over it

This section of the screen displays Page Title

The menus and submenus are displayed in a tree-based interface, which can be easily selected by expanding and collapsing the tree menu.

3   Work Process Management

The CLG process consists of multiple successive activities: Schema Definition, Item Classification, Pattern Building, Value-extraction and Quality Assurance. The CLG process also covers manual additions and modifications to items, definition of synonyms, definition of accessory information and association of items across different schemas.

A referencing schema of categories is defined for enabling classification of rich content items. These categories comprise classes and sub-classes in a parent - child relationship structure. Items are categorized within respective classes or subclasses based on their features or properties. These features/properties are called Attributes.

Incoming items are processed in stages in the ContentPlus. There are seven stages through which an item passes before it is available for publishing or syndication. These stages are:

❑ *Ready For Identification:* Incoming items are classified using automated or manual processes. The automated process matches incoming item descriptions with existing schema class attributes by using a pattern-recognition feature. The items are imported into matching schema classes and inherit the attributes of the respective parent classes.

❑ *Ready For Value Extraction:* Classified items are further processed to extract and populate attribute values using pattern-recognition features. Patterns are defined for both class attributes and attribute values and are stored in a pattern database.

❑ *Ready For Enrichment:* Value extracted items are further enriched by associating accessories, images & documents with it and associating the item with multiple schema classes. These items are then moved to the "Ready For QA" stage.

❑ *Ready For QA:* Quality Assurance procedures are performed on value - extracted and / or enriched items to identify and correct anomalies. These items are then approved and moved to the next stage.

❑ *Ready For Shipping:* Items that are approved by Quality Assurance process are flagged as "Ready For Shipping". These are then selected and shipped to the "Staging" data area so that they can be published, syndicated or maintained. The CLG and Maintenance functional areas operate on the same "Staging" data area.

3.1   Enhance Incoming Items

1.   Select User & Administration → CLG Processing → Work Process Management → Enhance Incoming Items in the tree menu on the home page. The Enhance Incoming Items screen will be displayed as follows:

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| Click on this to select all the records in the list | Click on this to remove the filter and display all the records in the list | Scroll to the specific record entered in the view field | List all records for the selected manufacturer |

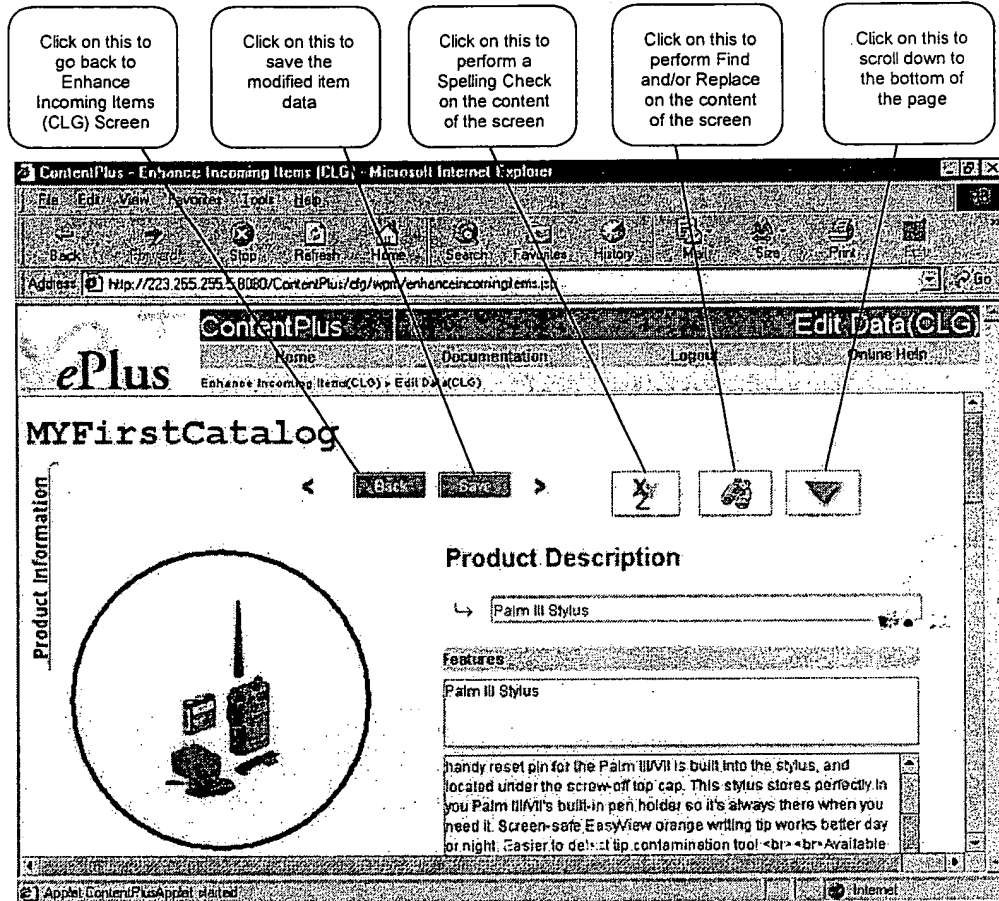| Click on this to enhance item in Edit Data (CLG) | Click on this to return to home page |

2. From the **Select Project** drop-down list, select the project. The list of items for the selected project will be displayed.

3. From the available Load Events, select the load event. The list of items for the selected load event will be displayed.

4. From the **Manufacturer** drop-down list, select a manufacturer and click on the **Go** button. The list of items for the selected manufacturer will be displayed.

5. You can enter a record number and click on the **GO** icon to go to the desired record for viewing and editing.

6. Click on the **Select All** icon to select all the items for editing. In case, the item list has been filtered then only the filtered list will be selected. Click again on the **Un Select All** to Unselect All the items in the list.

7. Click **Remove Filter** icon to remove and redisplay all items.

8. Click on the **Finish** button, it will return to home page.

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9. Click on the **Edit Data** button for enhancing item details, Edit Data (CLG) screen will appear.

Click on this to go back to Enhance Incoming Items (CLG) Screen

Click on this to save the modified item data

Click on this to perform a Spelling Check on the content of the screen

Click on this to perform Find and/or Replace on the content of the screen

Click on this to scroll down to the bottom of the page

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10. Click on the **Spell Check** icon if you wish to perform spelling check the contents of the page.

11. Click on the **Find & Replace** icon if you wish to Find and/or Replace text on the page.

12. In the **Product Description** field, modify the item description.

13. In the **Features** field, modify the item features.

14. In the **Manufacturer Part Number** field, change the manufacturer part number for the item.

15. In the **Supplier Name** field, modify the supplier name for the item.

16. In the **Supplier Part Number** field, modify the supplier part number for the item.

17. In the **Price Currency** field, modify the price currency for the item.

18. In the **Price** field, modify the item price.

19. In the **Cost Currency** field, modify the cost currency for the item.

20. In the **Cost** field, modify the item cost.

21. In the **Cost Unit of Measure** field, modify the cost unit of measure for the item.

22. In the **Cost Packaging Quantity** field, modify the cost packaging quantity for the item.

23.   In the **Effective Date** field, modify the effective date for the item.

24.   In the **Expiry Date** field, modify the expiration date for the item.

25.   In the **Shippable Packaging Quantity** field, modify the shippable packaging quantity for the item.

26.   In the **Delivery Days** field, modify the maximum number of days within which the item will be delivered.

27.   In the **Purchase Frequency** field, modify the purchase frequency for the item.

28.   In the **UPC Code** field, modify the UPC code for the item.

29.   In the **Upload Image** field, enter the path for the item image file to be uploaded. Click on **Browse Image** button to select the item image file from the appropriate location on the local system.

30.   In the **Add Attachments** field, enter the path for the attachment file to be uploaded. Click on **Browse** button to select the file from appropriate location on the local system. If required, link an existing shared attachment with the item by clicking on the shared attachment icon and selecting an existing attachment from the shared attachment dialog box.

31.   In the **Define Attributes** field, add attributes and values for the item.

32.   Click on the **Down Arrow** icon to scroll to the bottom of the screen. Similarly click on the **Up Arrow** icon to scroll to the top of the screen.

33.   Click **Left Arrow** and **Right Arrow** icon to scroll the next and previous item.

34.   Click on the **Save** button to save the modified item information.

35.   Click on the **Back** button, it will return to Enhance Incoming Items (CLG) screen.

3.2   Manage Global Patterns

1.   Select User & Administration → CLG Processing → Work Process Management → Manage Global Patterns in the tree menu on the home page. The Manage Global Patterns screen will be displayed as follows:

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Click on this to unselect all
the records in the list

2. Select the Global Pattern record from the list by selecting the appropriate checkbox.

3. Click on the **Add More** button, to add a new global pattern, which will have an "Approved" status by default.

4. Click on the **Save** button, to save the new global pattern added to the list.

5. Click on **Delete** button, to delete the selected global pattern.

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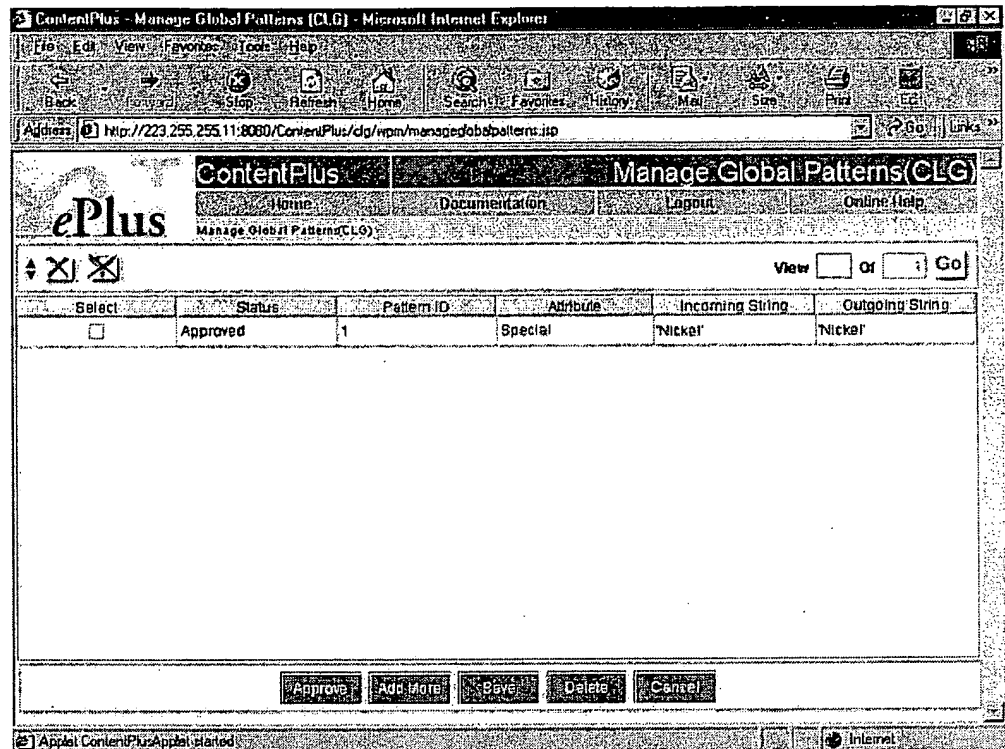
6.   Click on the **Approve** button, to approve pending global patterns.

7.   Click on the **Cancel** button, to return to the home page.

3.3 Processing Grid (Using Input Grid)

1. Select User & Administration → CLG Processing → Work Process Management → Processing Grid in the tree menu on the home page. The Processing Grid screen will be displayed as follows:

Click on this to check-out selected classes or groups from the processing grid (CLG)

2. From the **Select Project** drop-down list, select the project.

3. From the **Select Status** drop-down list, select the status Ready For Identification (default is Checked Out Item). This will show a list of class(es) along with the item counts for the selected project and the selected status.

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4.   You can enter a record number in the view field and click on the **GO** icon to go to the desired record for viewing.

5.   Click the **Select All** icon to select all groups or classes to be edited. In case, the item list has been filtered then only the filtered list will appear. Click on the **Un Select All** icon to Unselect all the items.

6.   Click **Remove Filter** icon to remove filter and redisplay all items.

7.   Select a class from the list and right-click on the cell. A popup menu will appear with three options, which can be used to check out a pre-defined percentage of the total items in the class based on the selection. Alternatively user can select one or more class(es) and click on **Check-out** button. Selected classes or groups will be checked out and removed from the Processing Grid (CLG) screen.

8.   Click on the **Cancel** button to return to the home page.

9.   From the **Select Status** drop-down list, select Checked Out Items to display all the checked out items.

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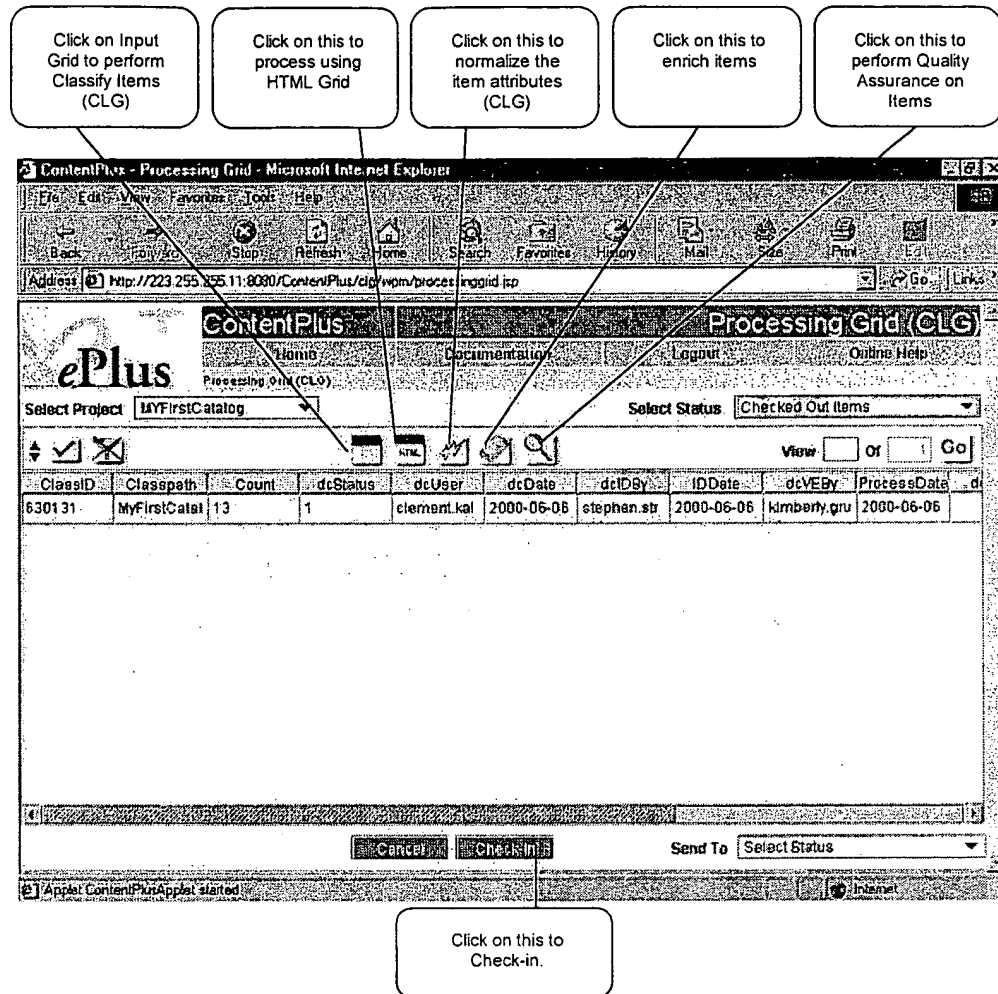
10.   Click on **Check-In** button, to send the item to the previous stage. Similarly, you can send an item to the next or the previous stage by selecting the appropriate stage from the **Send To** drop-down list. Click on the **Cancel** button to return to the home page.

11.   Select the class(es) from the list and click on the **Input Grid** icon, the Classify Item(CLG) screen will appear.

Click on this to configure options

Click on this to forcibly classify items under the selected class

Click on this to perform auto recognition for the selected items

Click on this to finish the classification process

Click on this to reset the values

12.   If you need to search a particular class to associate an item with this class, click on a class in the left pane, right click on it and select the Find Class option from the resulting right-click menu. The Find Class dialog box will appear. This option can be executed if the exact class path for the required class is not known.

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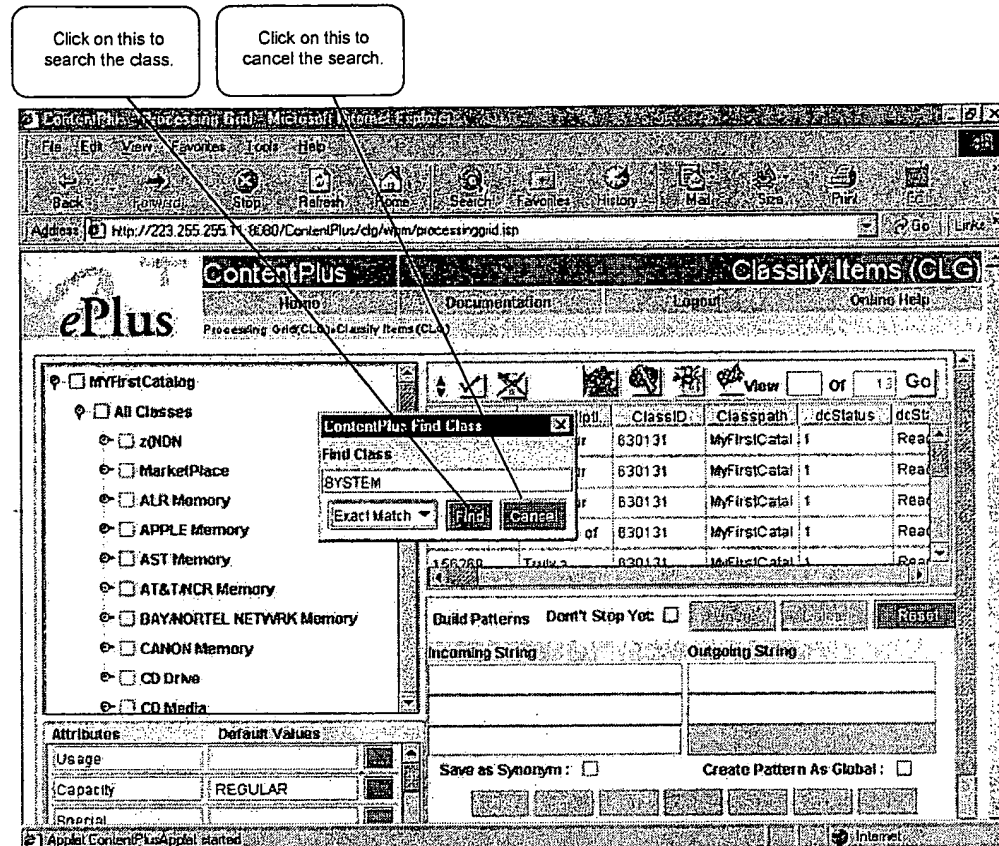
13. In the **Find Class** field, enter the class name for search. From the drop-down list select either **Any Word** or **Exact Match** option depending on the method for searching.

14. Click on **Find** button, the Class Name Search Results dialog box will appear. The dialog box will show the full class path under which the searched class was found.

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| Click on this to navigate to selected class | Click on this to search another class | Click on this to close the find dialog box |
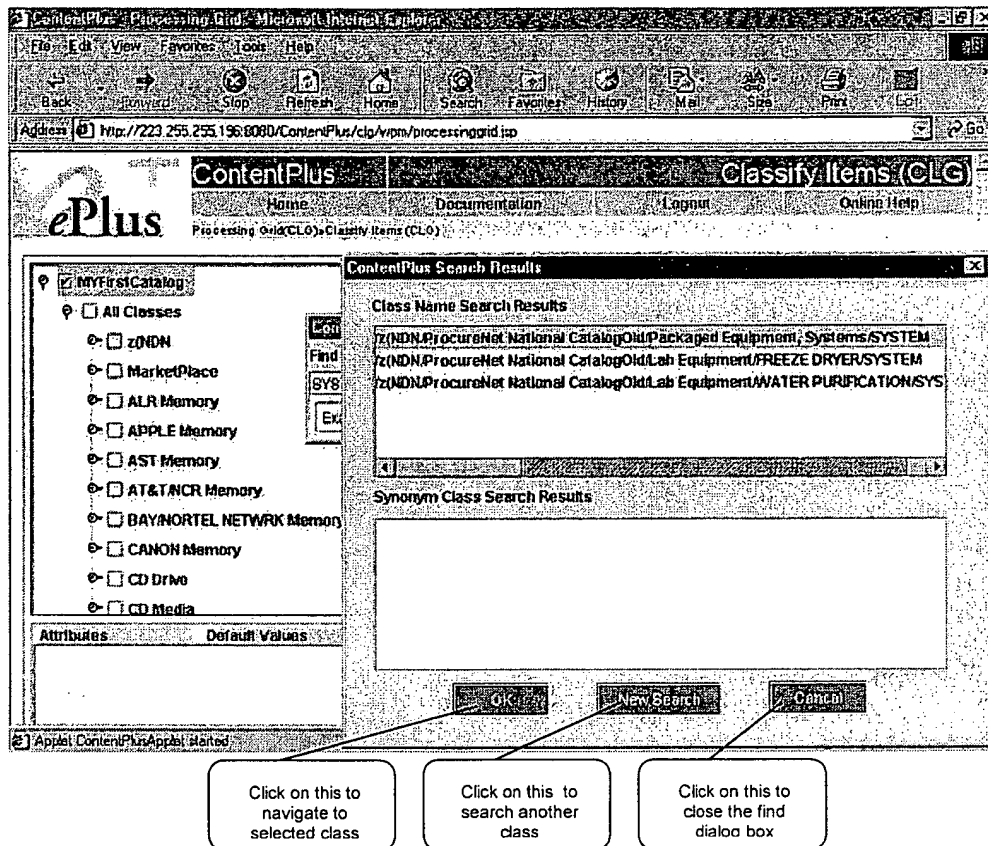
15.   Click on the class name you want to select and then click on **OK** button to close the dialog box. Click on **Cancel** button to exit from the search result window and return to Classify Items screen. If a new search is to be executed with a different search criteria then click on **New Search** button.

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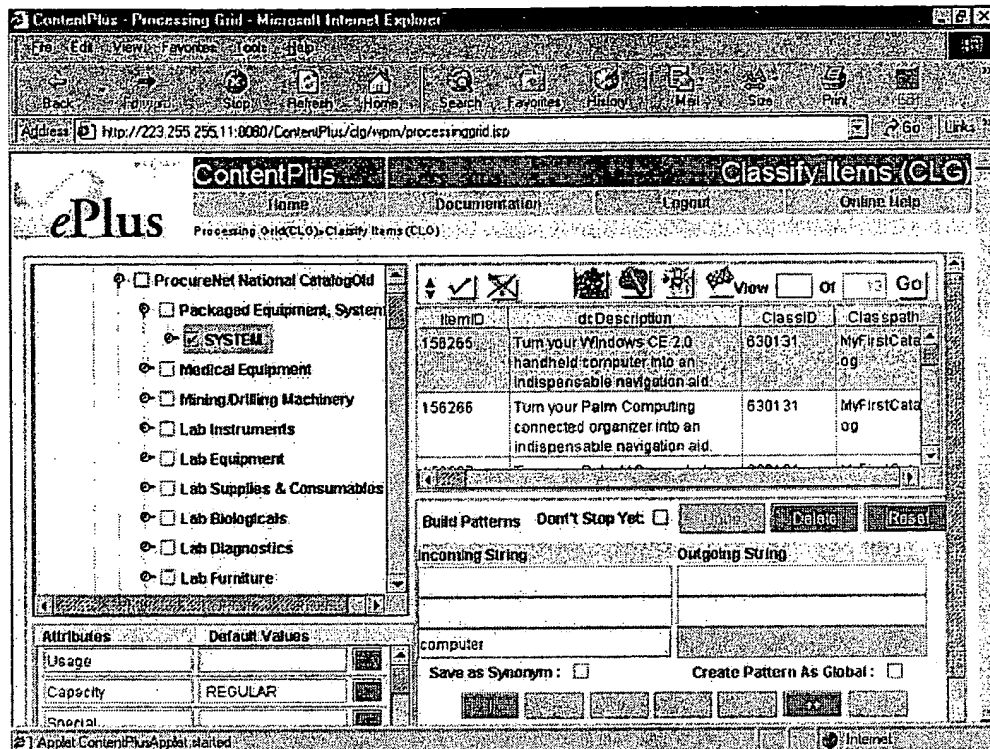
Icon	Description
✓	Select All Records in the list. The Unselect All icon will be displayed.
✗	Remove filtering to display all the records.
▦	Configure options to be used during classification and value extraction.
▦	Forcibly classify selected items under the selected class
▦	Perform auto recognition for the selected items
▦	Finish the classification process

Click on this to save the settings

Click on this to close the dialog box

16. Click the **Configure Option** icon, to configure options for the current user. The Configure Options dialog box will appear.

17. In the **Output Column Pair** field, enter a numeric value indicating maximum number of class attribute fields to be updated. The maximum limit is 30.

18. In the **Input Delimiters** field, enter delimiting characters that are present in the "dcDescription" field. The classification and value extraction is influenced by the input delimiters defined.

19. In the **Output Delimiters** field, enter a delimiting character that will be used in the produced "NETCProductDescription" field.

20. From the **Processing Method** drop-down list, select the Use Recognizer option to perform auto classification using the *Interpret* option, or select the Use Class Column option to retain the existing classification.

21. From the **Reinterpret** drop-down list, select the True option to reinterpret the last classification when patterns are saved or deleted. The last classification will not be reinterpreted if the False option is selected.

22. Select each attribute and the corresponding color using the color chooser tab pages and available options. Click on the **Save** button to save the settings. Click on **Close** button to close the dialog box.
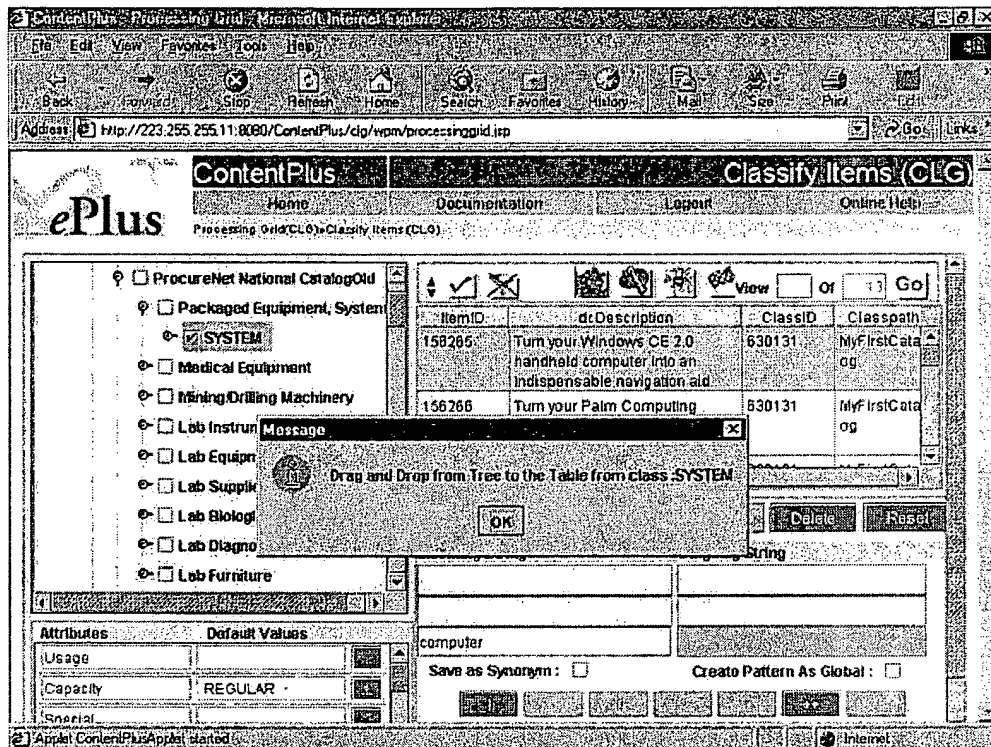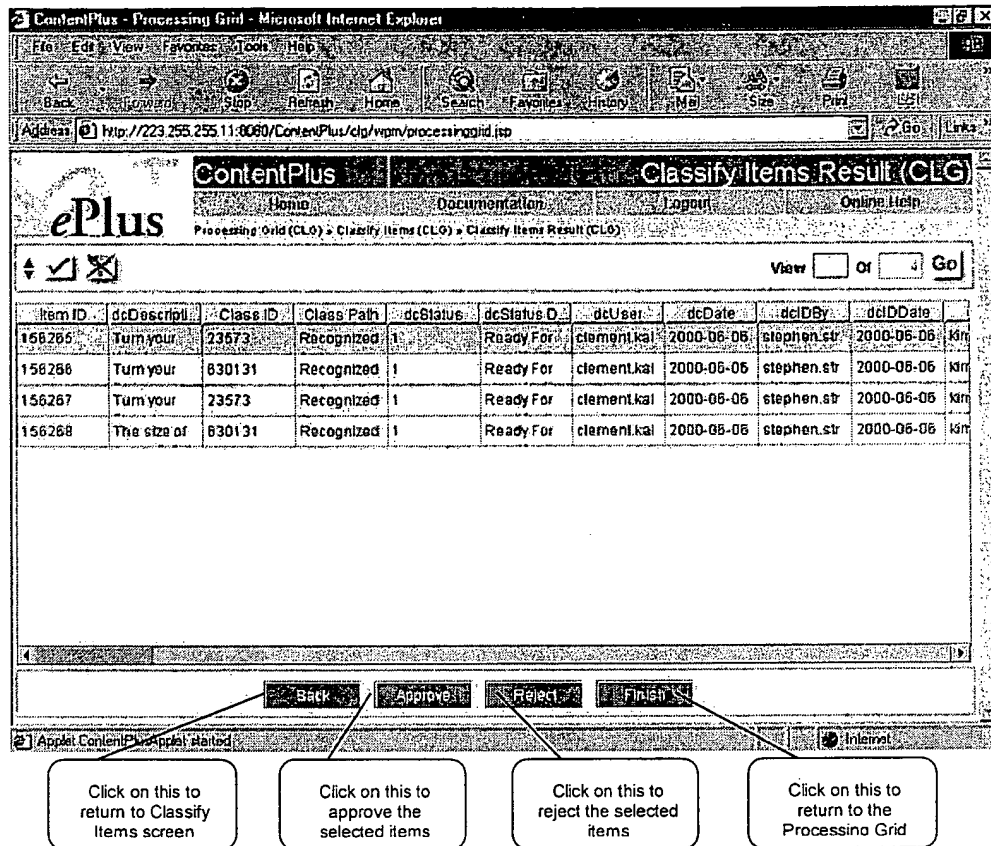
23. Clicking on any class will display its class specific attributes.

24. Click on the Select Attributes button, the Select Attribute dialog box will appear. Define attribute values for the required class attributes by double clicking on the respective attribute value in the dialog box.

25. In the Select Attribute dialog box, click on the **Edit** button to edit or add attribute values. Click on the **Save** button to save the changes. Click on the **Close** button to close the dialog box.

26. To classify items, select a class and select the items to be assigned to it, and drag and drop the class from the tree onto the selected items. Alternatively, manual classification can be performed by selecting a class, select the items to be assigned to that class and click on the **Force Class** icon or **Interpret** icon.

27. Click the **Finish** icon on this page to complete the classification operation and return to the Classify Items Result (CLG).

28. Click on the **Back** button to return to the Processing Grid (CLG) screen.

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| Click on this to return to Classify Items screen | Click on this to approve the selected items | Click on this to reject the selected items | Click on this to return to the Processing Grid |

29. To approve item(s), select item(s) and click **Approve** button. Once approved, selected item(s) will be removed from the Classify Items Results(CLG) screen.

30. Click **Finish** button to return to the Processing Grid (CLG) page.

31. Click on the **Reject** button, to reject the selected item(s). Selected item(s) will be removed from the Classify Items Results (CLG) screen.

32. Click on the **Back** button to return to the Classify Items (CLG) screen, the rejected items will be visible here.

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33.   From the **Select Status** drop-down list, select the status Ready For
        Value Extraction. This will show a list of class(es) for the selected project
        which are Ready for Value Extraction.

34. Select the required class(es) and click on the **Check-out** button. Selected classes or groups will be checked out and removed from the Processing Grid (CLG) screen.

35. Click on the **Cancel** button to return to the home page.

36. From the **Select Status** drop-down list, select Checked Out Items to display all the checked out items. Click on the Input Grid icon to proceed to the Value Extraction (CLG) screen.


Click on this to check-in selected items
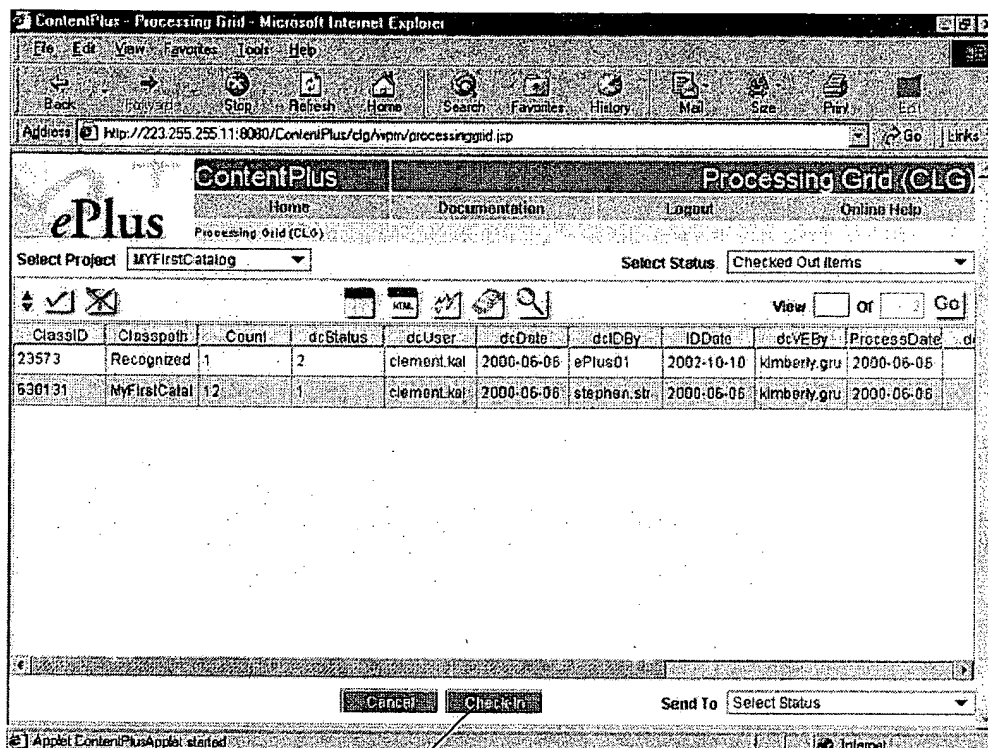
37. To build a pattern, select text from the "dcDescription" column or type in the description in the Incoming String field. Selected text will appear automatically in the **Incoming String** field. Using the pattern builder buttons build the required patterns.

38. Associate a pre-built pattern to an attribute by dragging and dropping the pattern onto the class specific attribute. Similarly, associate a pre-built pattern to a class by dragging and dropping the pattern onto any class in the schema tree.

39. Select the **Save the Synonym** checkbox, to save the pattern as a synonym.

40. Select the **Create Pattern As Global** checkbox, to create a global pattern which can be managed through Manage Global Patterns screen.

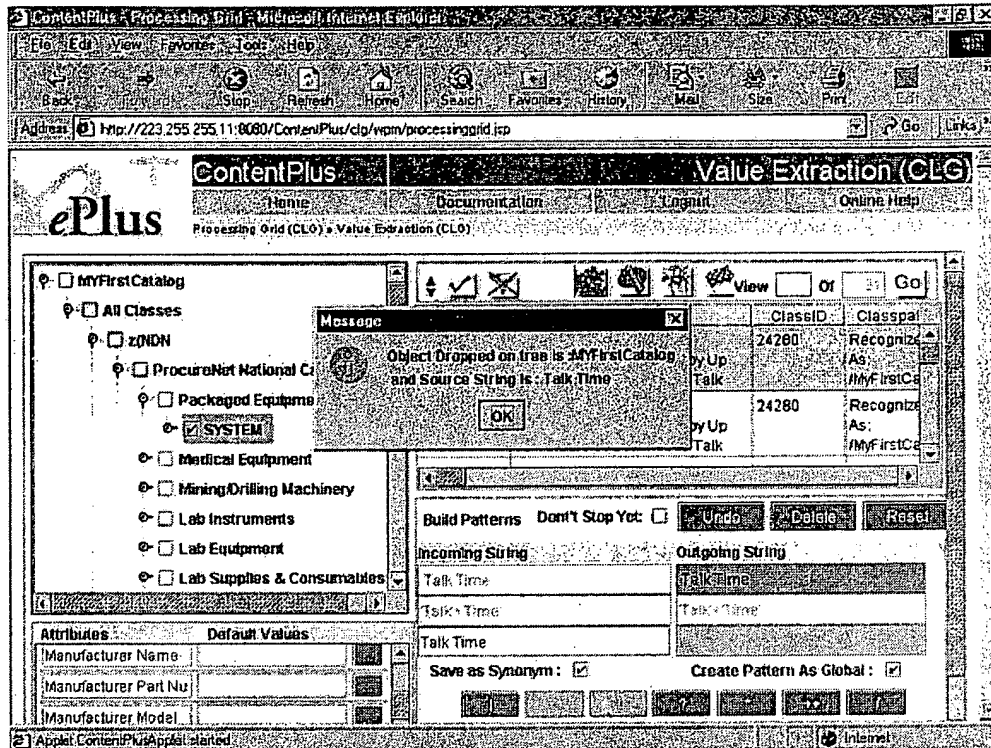**ContentPlus – Work Process Management User's Guide**

41. Select the **Don't Stop Yet** checkbox, if you want to continue pattern matching with other patterns.

42. Click the **Undo** button, to undo the last pattern building action.

43. Click **Delete** button, to delete the last pattern saved.

44. Click **Reset** button, to reset the build pattern begin all over again.
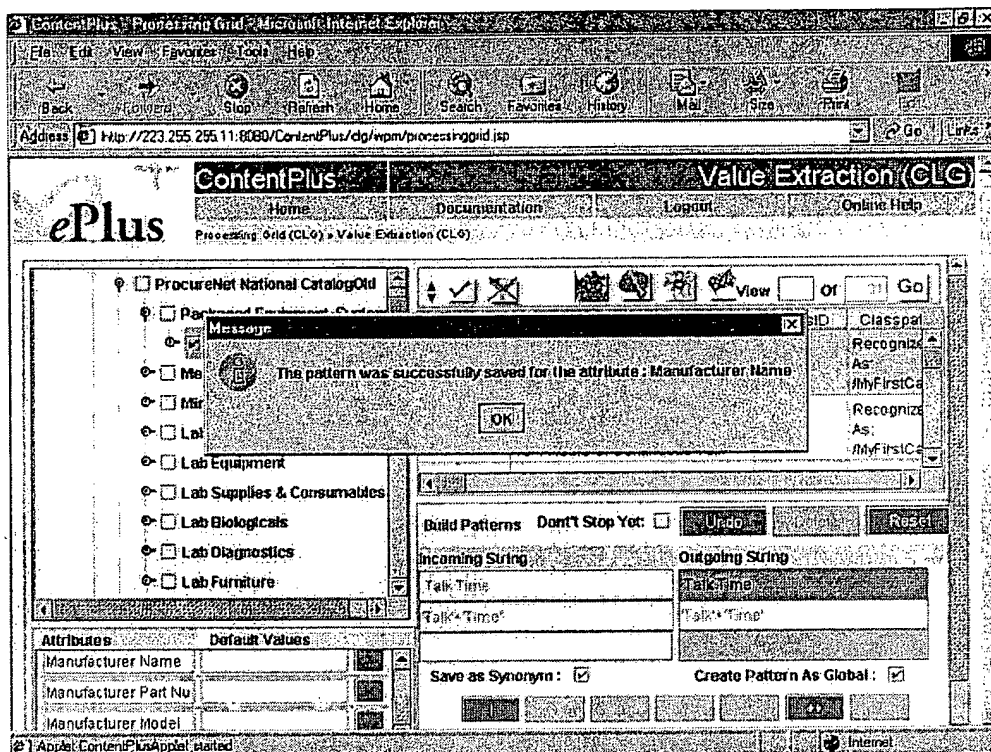
Icon	Description
	Build a literal pattern for input string
	Build a literal pattern, consisting of the complete selected text
	Append a space to the current pattern
	Build a numeric pattern, for input string
	Build the pattern string, comprising of a wildcard character at the specified position
	Build the pattern string, comprising of a wildcard characters starting from the specified position
	Split the pattern at the current cursor position

45.   Click on the **Back** button to return to the Processing Grid (CLG) screen.

46.   In order to perform value extraction, select item(s) from the item list and click **Force Class** icon or the **Interpret** icon. The selected items will undergo value extraction and removed from the list.

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47.   Click **Finish** button to return to the Classify Items Results (CLG) page.

48.   To approve item(s), select item(s) and click **Approve** button. Selected item(s) will be removed from the Classify Items Results (CLG) screen.

49.   Click **Finish** button to return to the Processing Grid (CLG) page.

50.   Click on the **Reject** button, to reject the selected item(s). Select ed item(s) will be removed from the Classify Items Results (CLG) screen.

51.   Click on the **Back** button to return to the Classify Items (CLG) screen, the rejected items will be visible here.

52.   From the **Select Status** drop-down list, select the status Ready For Value Extraction. This will show a list of class(es) for the selected project which are in the "Ready for Value Extraction" stage.

53.   Select the class(es) and click on the **Check-out** button to proceed to the next stage. Selected classes or groups will be checked out and removed from the Processing Grid (CLG) screen.

54.   Click on the **Cancel** button to return to the home page.
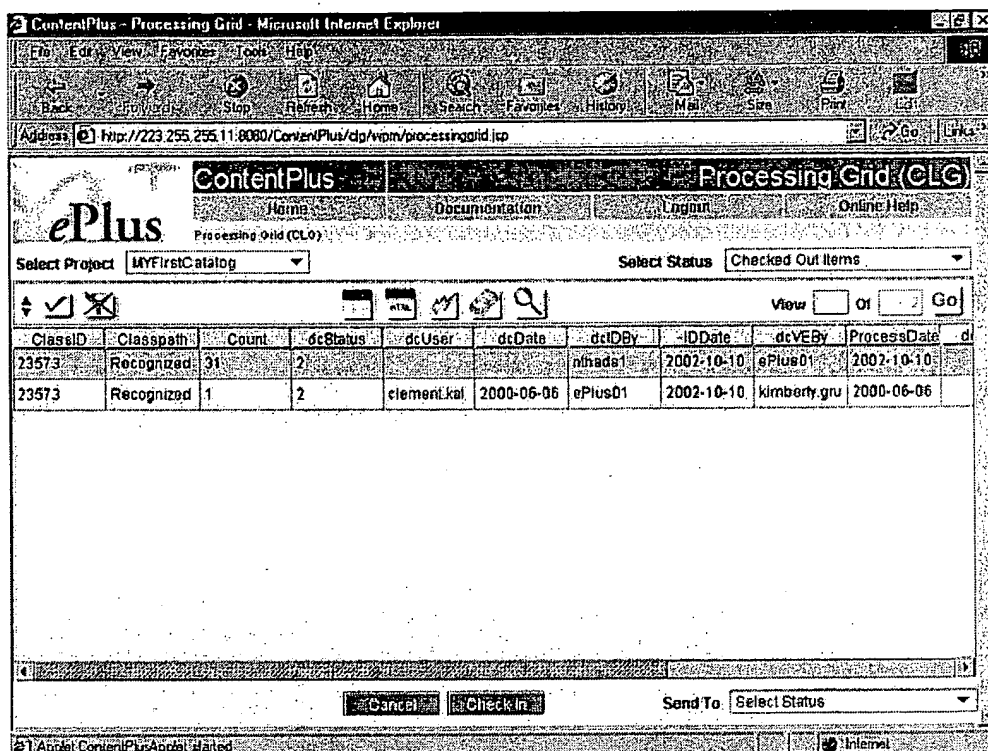
55.   Click on the **Electronic Grid** icon to normalize the item attributes. The Normalize Attributes (CLG) screen will be displayed. Alternatively, the items can be sent directly to "Ready For Enrichment" stage by selecting it from the Send To drop-down list.

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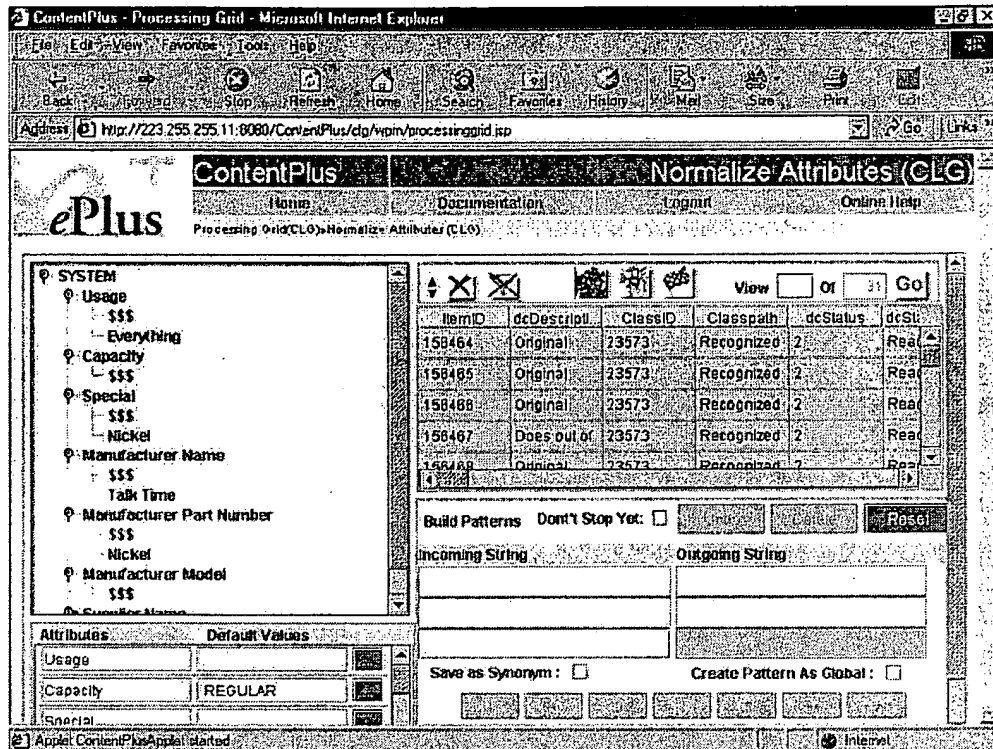
56. The extracted attribute and values are shown in a tree -like interface in the left pane.

57. Pattern building and associations can be performed here using the same method described in the previous steps.

58. Click on the **Back** button to return to the processing grid page.

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59.   Select item(s) and click on the **Interpret** icon. All the selected item(s) will remain visible in the Value Normalize Attributes (CLG) screen, however the tree will be automatically collapsed.

60.   Click on the **Finish** button to return to the Normalize Attributes Results (CLG).

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61.   To approve item(s), select item(s) and click **Approve** button. Selected item(s) will be removed from the Normalize Attributes Result (CLG) screen.

62.   Click **Finish** button to return to the Processing Grid (CLG) page.

63.   Click on the **Reject** button, to reject the selected item(s). Selected item(s) will be removed from the Normalize Attributes Result (CLG) screen.

64.   Click on the **Back** button to return to the Normalize Attributes (CLG) screen, the rejected items will be visible here.

65.   From the **Select Status** drop-down list, select the status Ready For Enrichment. This will show a list of class(es) for the selected project which are in the "Ready for Enrichment" stage.

66.   Select the class(es) and click on the **Check-out** button to proceed to the next stage. Selected classes or groups will be checked out and removed from the Processing Grid (CLG) screen.

67.   Click on the **Cancel** button to return to the home page.

68.   From the **Select Status** drop-down list, select the status Checked Out Items. This will show a list of all class(es) or groups which are checked out.

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69.   Select the class(es) from the list with dcStatus=3 and click on the **En rich Items** icon, the Enrich Items(CLG) screen will be displayed.

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70.   Click on the Item ID link from the list displayed, the View Item screen will be displayed showing the selected item information.

71.   Click on the **Cancel** button to return to the Processing Grid page.

72.   Alternatively, from the **Send To** drop-down list, user can send items to next or previous status.
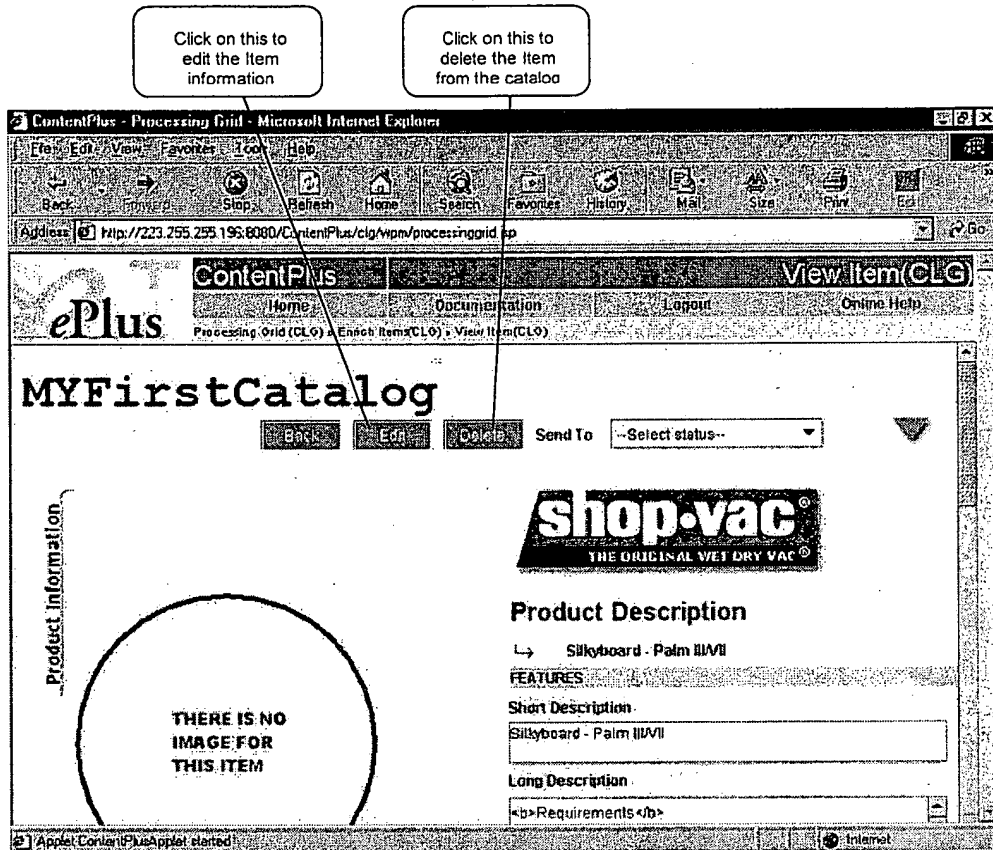
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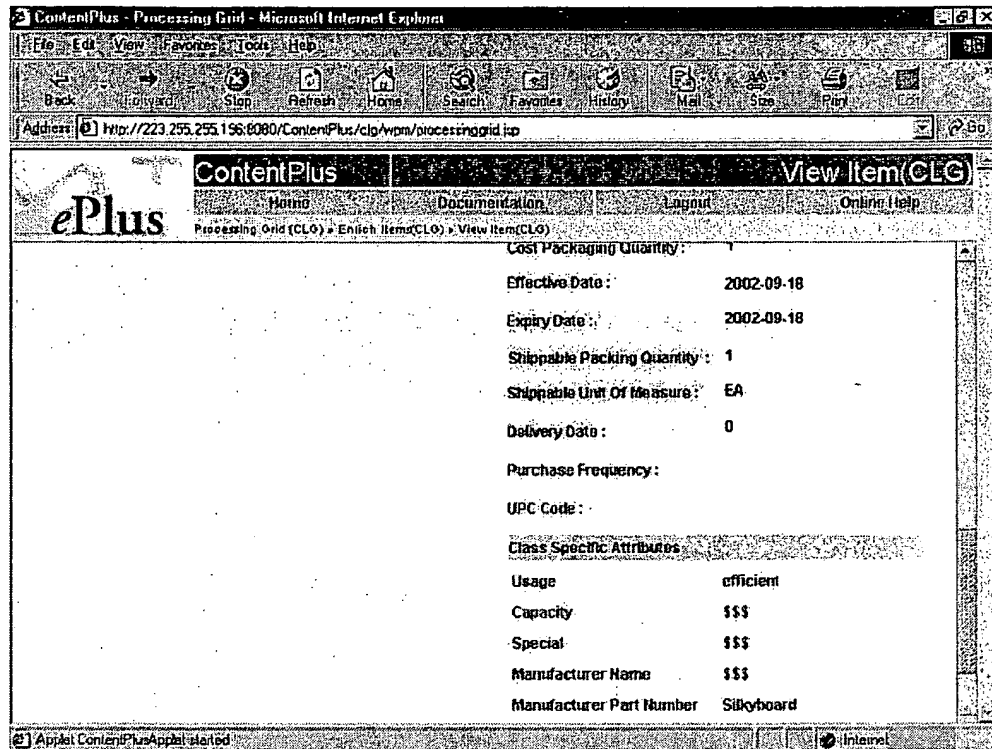
73.   Click on the **Back** button to return to the Enrich Items(CLG) screen. Click on the **Delete** button to delete the item from the catalog

74.   From the **Send To** drop-down list, user can send items to next or previous stages.

75.   Click on the **Edit** button for modifying the item information.

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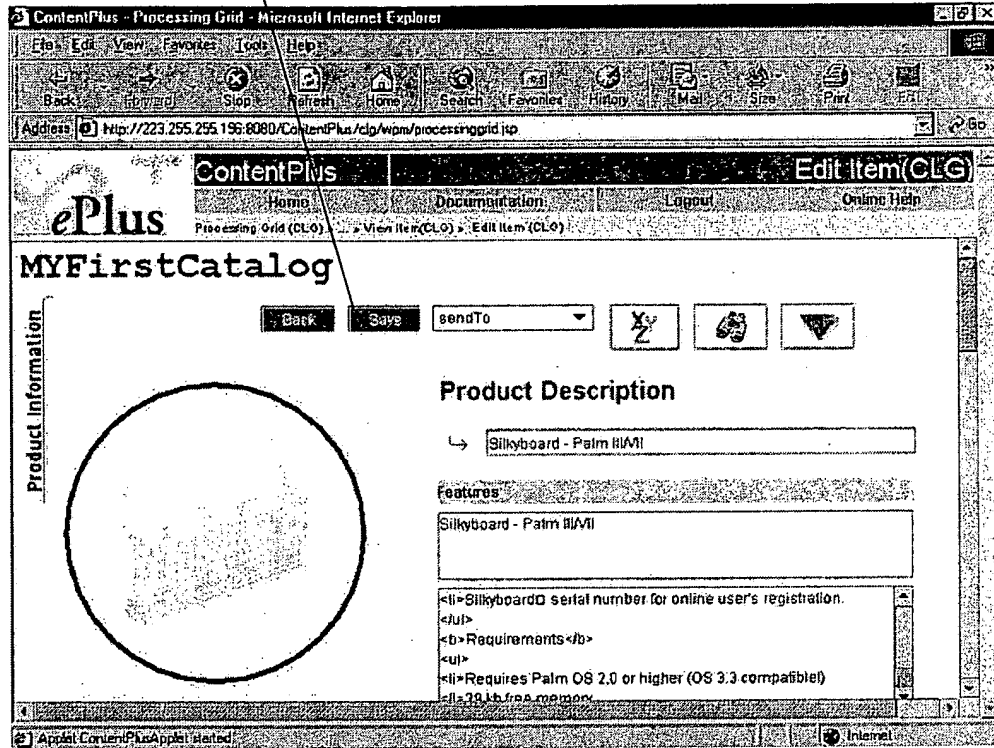
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Click on this to delete the selected attachment(s)

76.   In the **Product Description** field, modify the item description.

77. In the **Manufacturer Part Number** field, change the manufacturer part number for the item.

78. In the **Supplier Name** field, modify the supplier name for the item.

79. In the **Supplier Part Number** field, modify the supplier part number for the item.

80. In the **Price Currency** field, modify the price currency for the item.

81. In the **Price** field, modify the item price.

82. In the **Cost Currency** field, modify the cost currency for the item.

83. In the **Cost** field, modify the item cost.

84. In the **Cost Unit of Measure** field, modify the cost unit of measure for the item.

85. In the **Cost Packaging Quantity** field, modify the cost packaging quantity for the item.

86. In the **Effective Date** field, modify the effective date for the item.

87. In the **Expiry Date** field, modify the expiration date for the item.

88. In the **Shippable Packaging Quantity** field, modify the shippable packaging quantity for the item.

89. In the **Delivery Days** field, modify the maximum number of days within which the item will be delivered.

90. In the **Purchase Frequency** field, modify the purchase frequency for the item.

91. In the **UPC Code** field, modify the UPC code for the item.

92. In the **Upload Image** field, enter the path for the item image file to be uploaded. Click on **Browse Image** button to select the item image file from the appropriate location on the local system.

93. In the **Add Attachments** field, enter the path for the attachment file to be uploaded. Click on **Browse** button to select the file from appropriate location on the local system. If required, link an existing shared attachment with the item by clicking on the shared attachment icon and selecting an existing attachment from the shared attachment dialog box.

94. In the **Class Specific Attributes**, modify the class attribute values. The options for the attribute values can be viewed by clicking on the Select Attributes button adjacent to the attribute value field.

95. Click **Add Accessories**, the Add Accessories (CLG) screen will be displayed. Select the class from the schema tree, which contains items that must be added as an accessory. Select the item from the item list in the right page, select the association type from the drop-down list, enter

the quantity and click on the Save button. The selected item will be added as an accessory for the original item and user will be returned to Edit Item screen.

If needed, enter the item description or item id in the search text field and click on the Go button. Matching items will be displayed in the right pane.
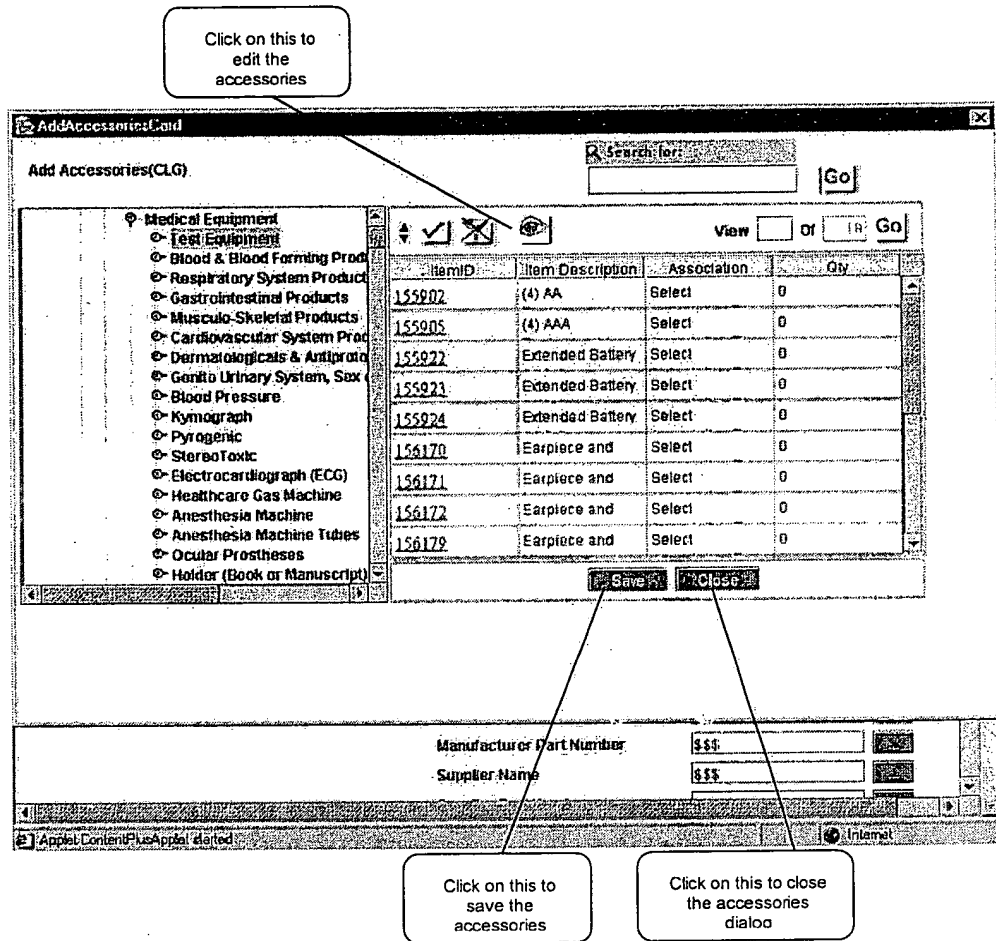
96.   Click on the **Close** button to close the Add Accessories(CLG) screen. .

97.   Click on the **Edit** icon, to edit the accessory information in the Edit Accessory window.

98.   Click on the **View Accessories** link, the View Accessories dialog box will be displayed.

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Click on this to close
the View Accessories
screen

99. Click on the **Close** button to close the View Accessories dialog.

100. Click on the icon for spell check if you wish to spell check the contains of the page.

101. In the Edit Item (CLG) screen, click on the **Maintain Other Classification** link, the Maintain Other Classification (CLG) screen will appear.

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| Delete association with the selected class | Associate Item with the selected class | Close the dialog box |
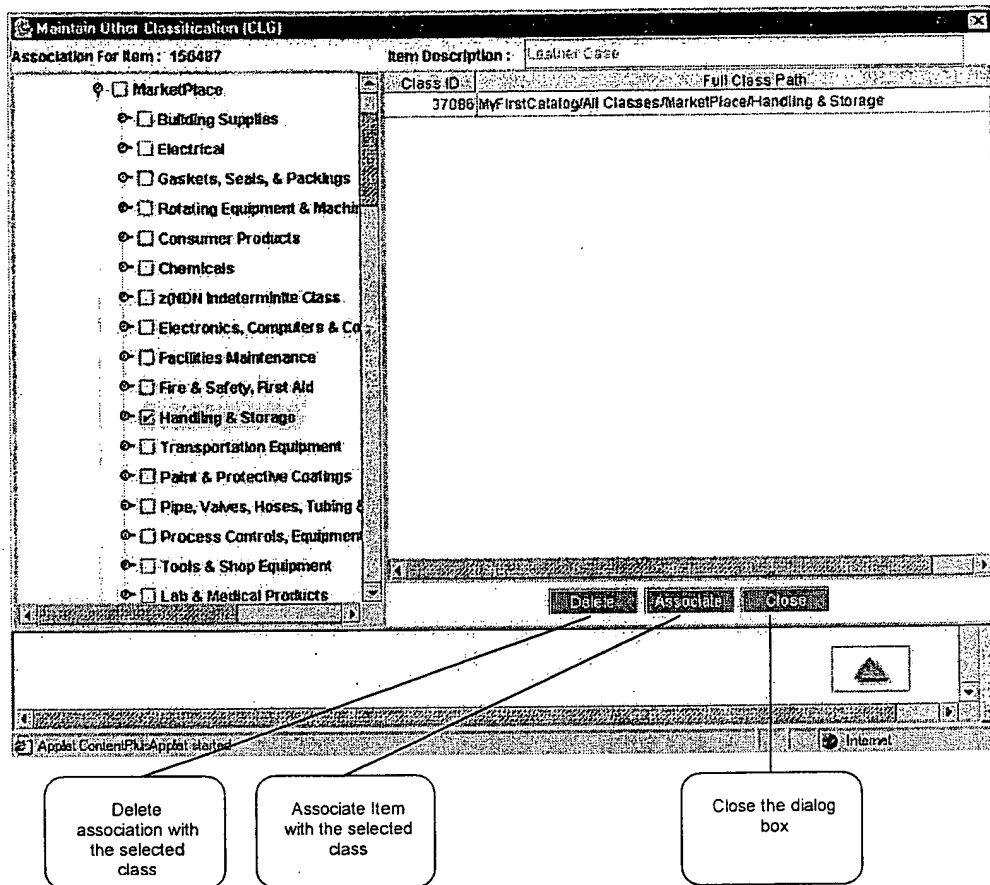
102. Expand the schema class tree if needed, and click on the class in the left pane. The right pane will display the list of items for the selected class.

103. Select the class form the schema tree, click on the **Associate** button to associate the item with the class.

104. Click on the **Delete** button, to delete the item association.

105. Click on the **Back** button, to return to Maintain Other Classification (Checkout) items screen.

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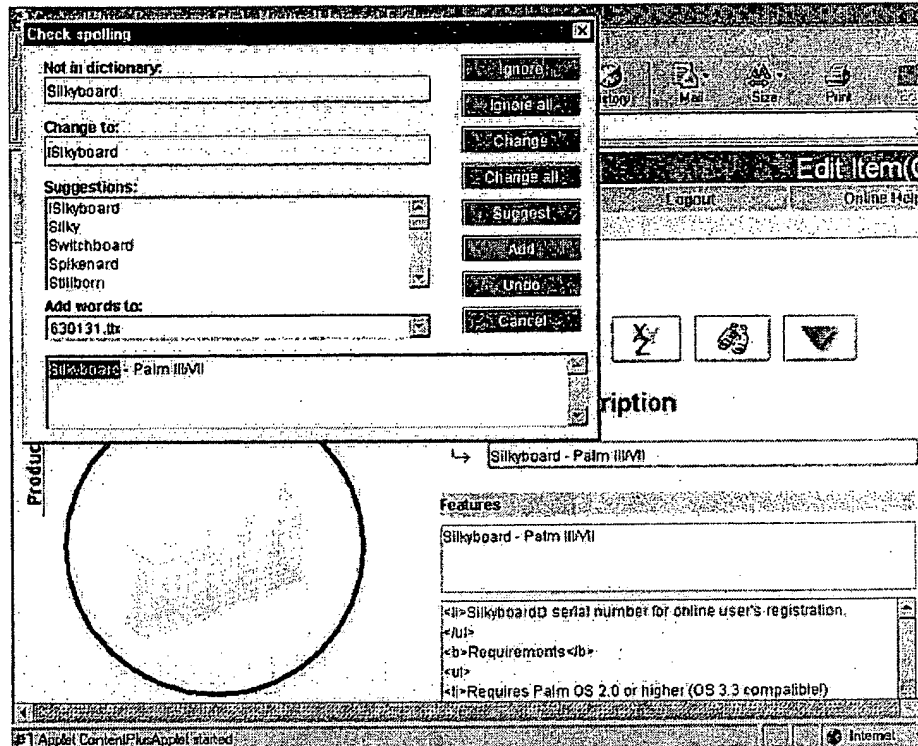
106.

Not In Dictionary	Specified the word which does not exist in the dictionary
Change To	Specifies the change to word
Suggestions	Specifies possible/suggested words
Add Word To	Enter the dictionary in this field to which the word is to be added
Ignore	Click on this button to ignore the word
Ignore All	Click on this button to ignore all the occurrences of the word
Change	Click on this button to change the word with the suggested option
Change All	Click on this button to change all the occurrences of the word with the suggested option
Suggest	Click on this button to suggest the changes
Add	Click on this button to add the word in the selected dictionary
Undo	Click the button to undo the changes done to correct the word
Cancel	Click this button to cancel the changes and exit from the window

107.   Click on the icon for Find & Replace if you wish to Find and/or Replace contains of the page.
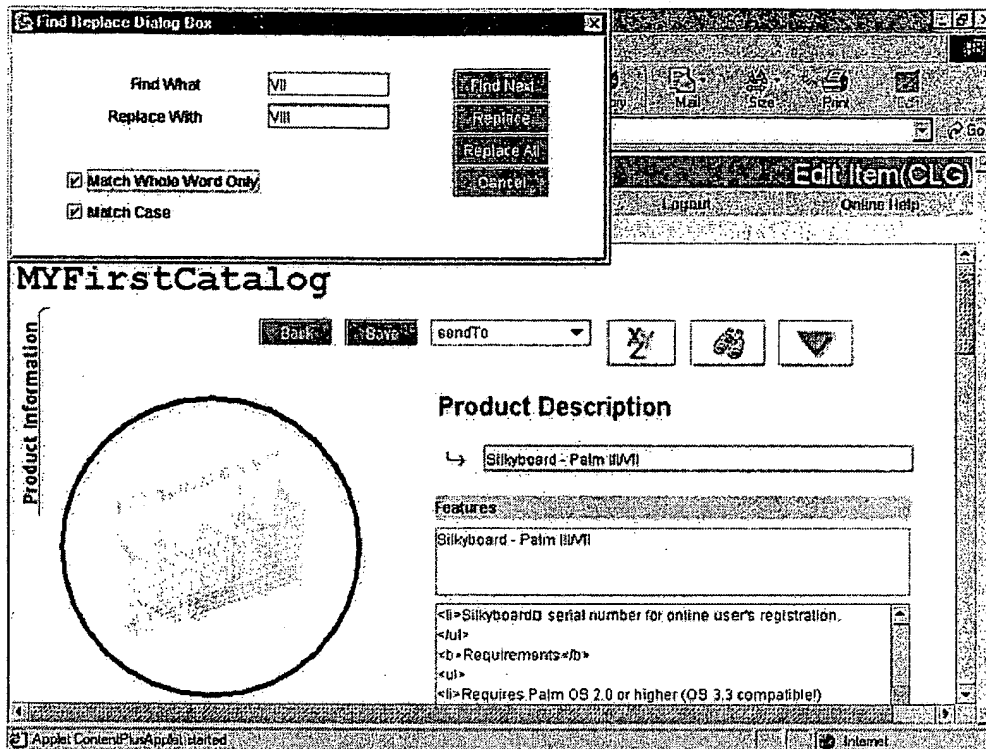
Find What	Enter the find text/word
Replace With	Enter the replacement text/word
Find Next	Find the next occurrence of the find word
Replace	Perform replacement for the current occurrence only
Replace All	Replace all occurrences of the find word with the replacement word
Cancel	Cancel the Find and Replace operation and close the dialog box
Match Whole Word Only	Search for whole words only.
Match Case	Perform case-sensitive search

108. Click on the **Save** button in order to save the item details. From the **Send To** drop-down list, user can send items to next or the previous stage.

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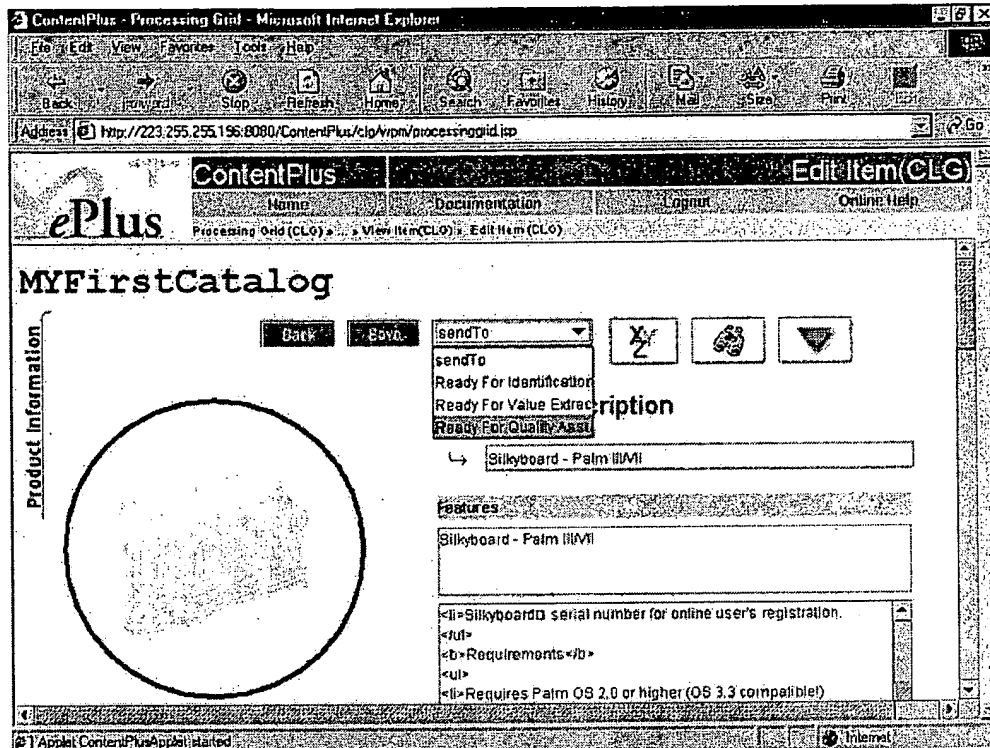
109.   Click on the **Back** button to return to the View Item screen.

110.   In the view item screen, click on the **Back** button to return to the Enrich Items(CLG) screen.

111.   Click on the **Cancel** button to return to the Processing Grid Screen.

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112. From the **Select Status** drop-down list, select the status Ready For Quality Assurance. This will show a list of class(es) for the selected project which are in the "Ready for Quality Assurance" stage.

113. Select the class(es) and click on the **Check-out** button to proceed to the next stage. Selected classes or groups will be checked out and removed from the Processing Grid (CLG) screen.

114. Click on the **Cancel** button to return to the home page.

115. From the **Select Status** drop-down list, select the status Checked Out Items. This will show a list of all class(es) or groups which are checked out.

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116. Select the class(es) from the list with dcStatus=4 and click on the **QA Items** icon, Quality Assurance (CLG) screen will be displayed.
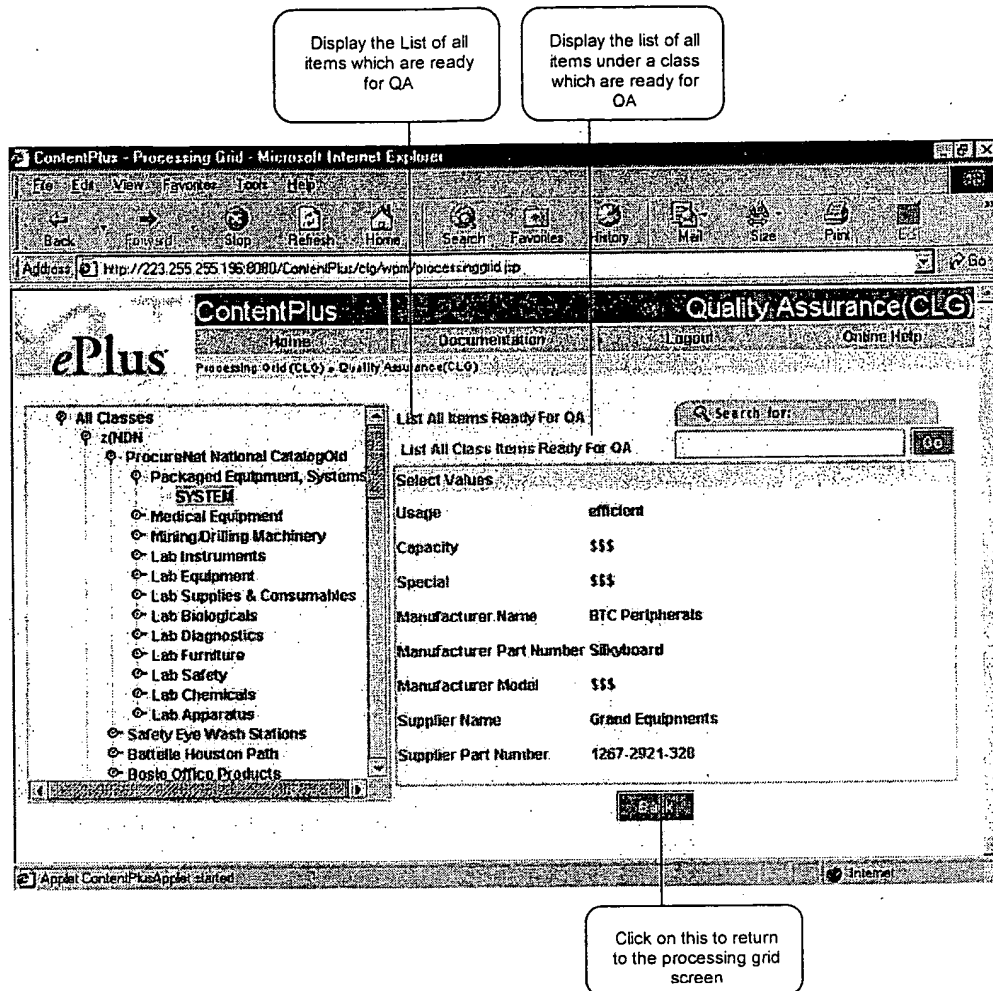
117. In order to view all the items in the Ready for Quality Assurance stage, click on the **List All Items Ready for QA,** the All Items Ready for QA(CLG) screen will appear with the list of items.

118. Item can be searched using the full-text search feature, by entering freeform text in the search text field.

119. In order to view items under a class which are in the Ready for Quality Assurance stage, expand the schema class tree and select the required class. Click **List All Class Items Ready for QA,** the All Class Items (CLG) screen will be displayed with the list of items under the selected class.

120. Click on the **Back** button to return to the processing grid screen.

Click on this to return to the Quality Assurance (CLG) screen

Click on this to Approve the currently selected item

121. Click on the Item ID link from the All Class Item list, the View Item (CLG) screen will be displayed.

122. Click on the **Back** button to return to the Quality Assurance(CLG) screen.

123. Alternatively, from the **Send To** drop-down list, user can send item(s) to previous status. Selected item(s) will be removed from the list.

124. Select the item(s) from the list and click **Approve** button to approve the current item. Selected item(s) will be removed from the list.

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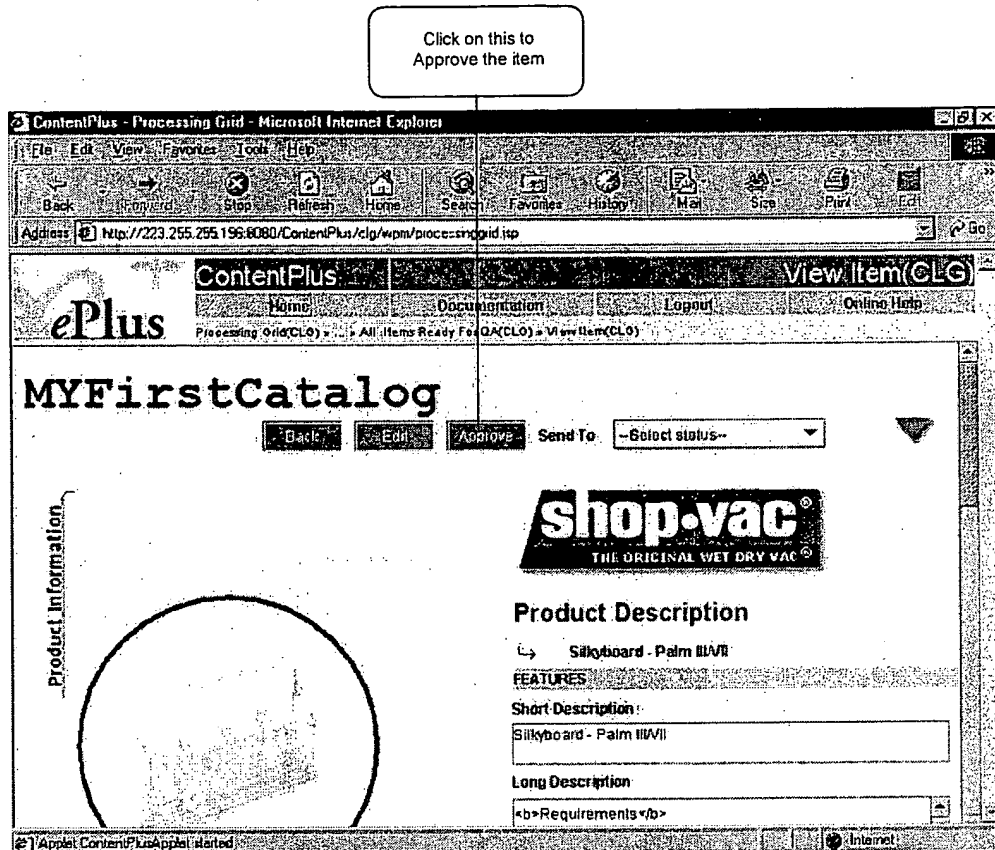
125. Click on the **Back** button to return to the All Class Items(CLG) screen. Click on the **Edit** button, for modifying the item information.

126. From the **Send To** drop-down list, user can send items to previous stage.

127. Click on the **Approve** button to approve the item. On approving item, next item will appear, or it will return to the View Item (CLG) screen if no further items exist.

128. In the Quality Assurance (CLG) screen, you can search for items based on their attributes.

129. Expand the schema class tree if needed, and click on the class in the left pane under which the item(s) are to be searched based on their attributes. In case, the exact path for the class is not known then use the Find Class feature to locate the required class. The right pane will display the attribute names and a drop-down list containing the possible attribute values. The default value in the drop-down list will be set to **No Preference**.

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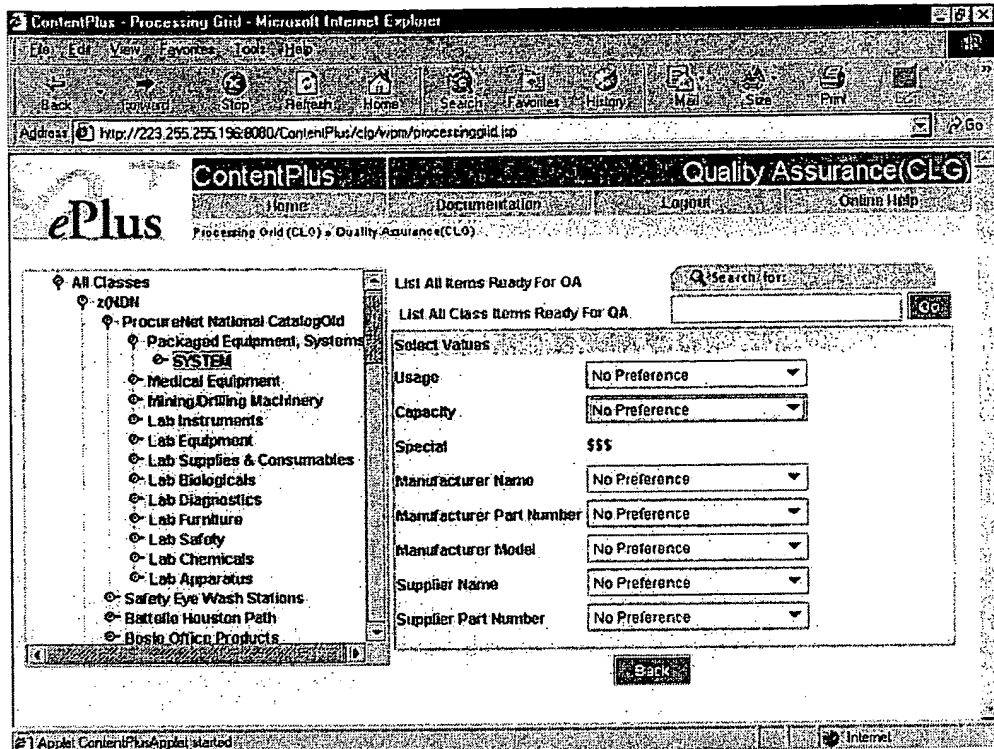
130.   Define the search criteria by selecting values from the drop-down list to
        search for items matching the specified criteria. If items matching the
        specified criteria are found, a count of items will be displayed against the
        drop down list. For e.g. in the sample screen displayed below, there is 1
        item with Manufacturer Name as Wireless Access.

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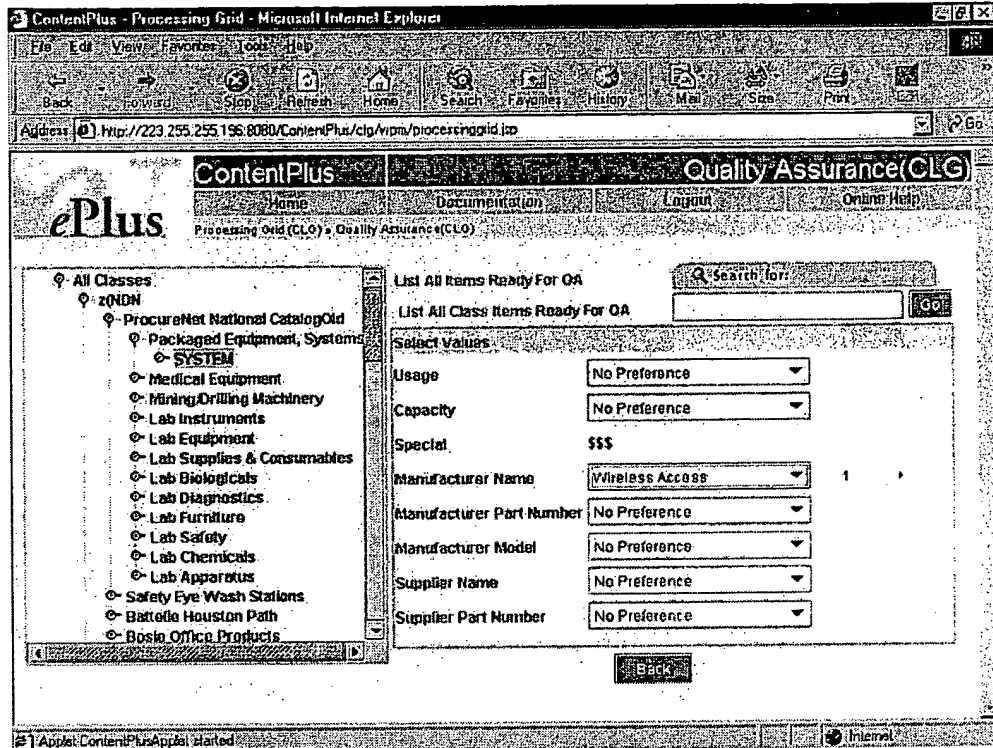
131.   If multiple items matching the search criteria are found, you can further refine your search to narrow down on specific items by modifying the search criteria. Once the item count is equal to 1, you click on the link to view the matching item. The View Item (CLG) screen will be displayed as shown below.

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132.   Click on the **Back** button to return to Quality Assurance (CLG) screen.

133.   Similarly, items can be searched by entering free-form text in the **Search For** field in the right pane. Enter a text in the **Search For** field, and click on the **Go** icon. The Search Results screen showing the classpath (categories) along with the item count and the list of items will be displayed as shown below.

134.   Click on the Item ID link, the View Item (CLG) screen will be displayed which will show the item details. You can click on the Edit button in the View Item screen to edit item information. Clicking on the **Approve**

button will approve the selected item. Clicking on the **Back** button will return to the Quality Assurance (CLG) screen.

3.4 Processing Grid (Using HTML Grid)

1. Select User & Administration → CLG Processing → Work Process Management → Processing Grid in the tree menu on the home page. The Processing Grid screen will be displayed as follows:

2. From the **Select Project** drop-down list, select the project.

3. From the **Select Status** drop-down list, select the status Ready For Identification (default is Checked Out Item). This will show a list of class(es) for the selected project.

4. Select one or more class(es) and click on **Check-out** button. Selected classes or groups will be checked out and removed from the Processing Grid (CLG) screen.

5. Click on the **Cancel** button to return to the home page.

6. From the **Select Status** drop-down list, select the status Checked Out Items. This will show a list of all class(es) or groups which have been checked out.

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7.   Select the class(es) from the list and click on the **HTML Grid** icon, the Classify Item(CLG) screen will be displayed. .

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8.   Click on the **Select Items to View** icon, the Select Fields to View (CLG) dialog box will appear.

9.   Select the fields in the Select Fields to View (CLG) dialog box, and click on the **Apply** button. The selected fields will be displayed in the right pane of the Classify Items (CLG) screen.

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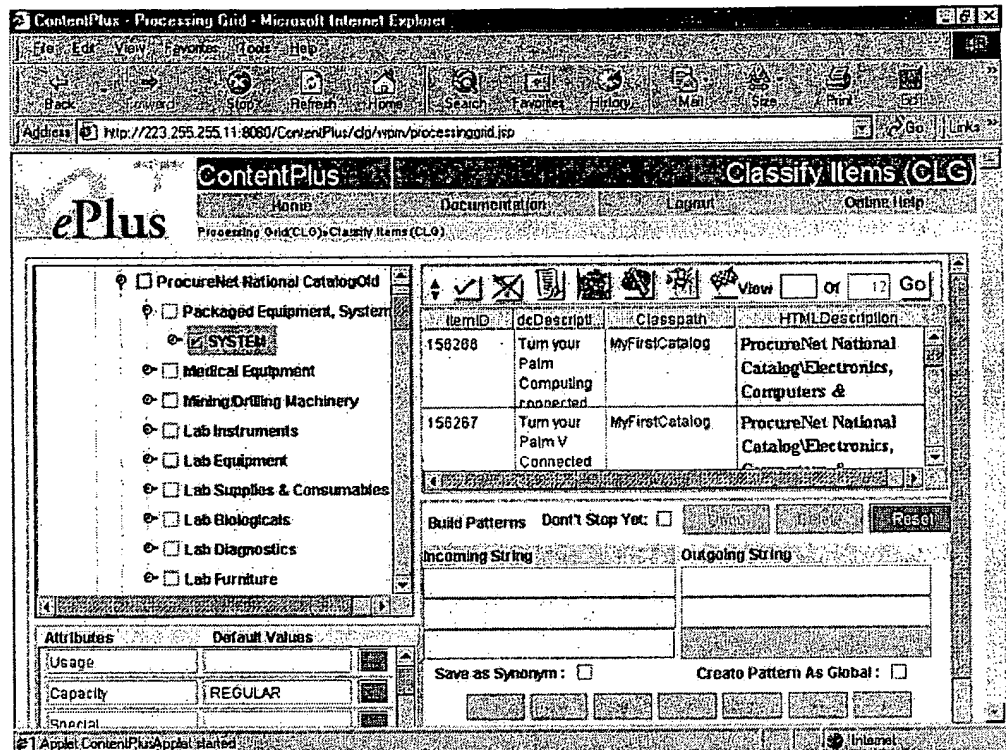
10.   Use the slider on the left of the table to adjust the height of the table row.

All the subsequent steps are identical to the process described in section 3.3 Processing Grid (Input Grid).

APPENDIX IV – DATA SYNDICATION

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1   Introduction

1.1   Welcome to ContentPlus

ContentPlus, is a robust, easy-to-use rich content creation and management application that provides users with the ability to:

- Create a standard rich content database with referencing schema of classification.
- Maintain classification schema and items by addition, modification or deletion.
- Import classification schema and rich content data from different sources.
- Optimize Content and Product Views based on User Profiles and Shopper Groups.
- Manage Access Authorization and Security Levels for application and database.

1.2   System Requirements

ContentPlus is a web-based, browser-independent application. As a web-based application, ContentPlus requires the Java Runtime Environment (JRE), a standard browser and access to the Internet.

As a browser-independent application, ContentPlus can be accessed with a variety of standard browsers, including Microsoft Internet Explorer and Netscape Navigator. The following are the software and hardware requirements for using ContentPlus.

Software Requirements

- Java Runtime Environment v 1.4.0 or higher

- Internet Explorer v. 5.5 or higher
  -OR-
  Netscape Navigator v. 6.0 or higher

Hardware Requirements

- 800 x 600 pixels screen resolution

1.3   Contacting ePlus Content Services, Inc.

Refer to the following sections for information about contacting ePlus, inc. for customer support or sales information.

1.3.1   ePlus, Inc. Headquarters

ePlus, inc. is a leading provider of supply chain management solutions. From integrated financial services, to an end-to-end, web-based procurement application, to a comprehensive, web-based asset management application, to unparalleled client services, ePlus, inc. provides its rapidly growing customer base complete supply chain management solutions.

Corporate Headquarters

Address

ePlus, inc.

400 Herndon Parkway

Herndon, VA 20170

Telephone

1-703-264-0770

    -or-

1-800-827-5711

Office Hours

Monday to Friday

9:00 A.M. to 5:30 P.M. Eastern Standard Time

2 Getting Started

2.1 Logging into ContentPlus

Your ContentPlus System Administrator provides you the Uniform Resource Locator (URL) of your organization's ContentPlus site along with your ContentPlus login name and password.

Your login information is used to verify your access permissions and to control the functions you can see and perform in ContentPlus.

Logging into ContentPlus is easy. After you access the ContentPlus Login page, simply enter your login name and password.

2.1.1 Logging into ContentPlus Site

1. Launch your browser software, and type the URL of your organization's ContentPlus site. The ContentPlus login page for your organizations' site appears.

2. From the ContentPlus login page, in the **User ID** field, enter your ContentPlus site user id.

3. Similarly, in the **Password** field, enter your site password. The password will be encrypted and therefore it will show as asterisk '*'.

4. Click on the **Login** button. The ContentPlus home page, which is the central screen of ContentPlus appears.

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2.1.2   The ContentPlus Home Page

Logging into the ContentPlus site displays the ContentPlus home page. The home page provides access to a range of functions available in the application.

Note: The navigation button viz. Back, Forward, Refresh, Home etc. present on the browser's toolbar must not be used for navigation. Always ensure that the navigation buttons provided on the application interface are used to navigate within the application.

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Click on this to view the context sensitive user documentation for the current screen

Click on this link to logout of the ContentPlus application. The login page will be displayed.

Click on this link to return to the home page from any screen within the application.

Provides context sensitive online help when the mouse pointer is moved over it

This section of the screen displays Page Title

The menus and submenus are displayed in a tree-based interface, which can be easily selected by expanding and collapsing the tree menu.

3   Data Syndication

Data Syndication consists of exporting catalogs to various customers. An entire catalog or a specific product view of the catalog can be exported to a customer. Sets of wizard-like GUI screens are provided to facilitate export. The user will specify the user group (shopper) and the catalog for syndication.

User can use audit reports to view details about each export process. An option to view the report in a printer-friendly format is provided.

3.1   Data Syndication

1. Select Administration → Data Syndication → Data Syndication in the tree menu on the home page, the Data Syndication (Set Up) screen will be displayed.

2. From the **Select Syndication Template** drop-down list, select the syndication template for which the outgoing items are to be exported.

3. From the **Select Catalog** drop-down list, select the catalog name to which the selected outgoing templates will be assigned.

4. From the **Apply Product View** drop-down list, select the product view (default is Full Catalog).

5. Click on the **View It** link, the View Export Content screen will be displayed.

Adjust Row Height

Click on this to select all the Items in the List

Remove filter to display all the records

Click on this to scroll to the record specified in the view field

Click on this to View the Item Details

Click on this to return to the previous screen

6. Expand the schema class tree if needed, and click on the class in the left pane. The list of items under the selected class will be displayed in the right pane.

7. Click on the **Item ID** link, to view the item details as shown below

Click on this return to the previous screen

Click on this to scroll to the bottom of the screen
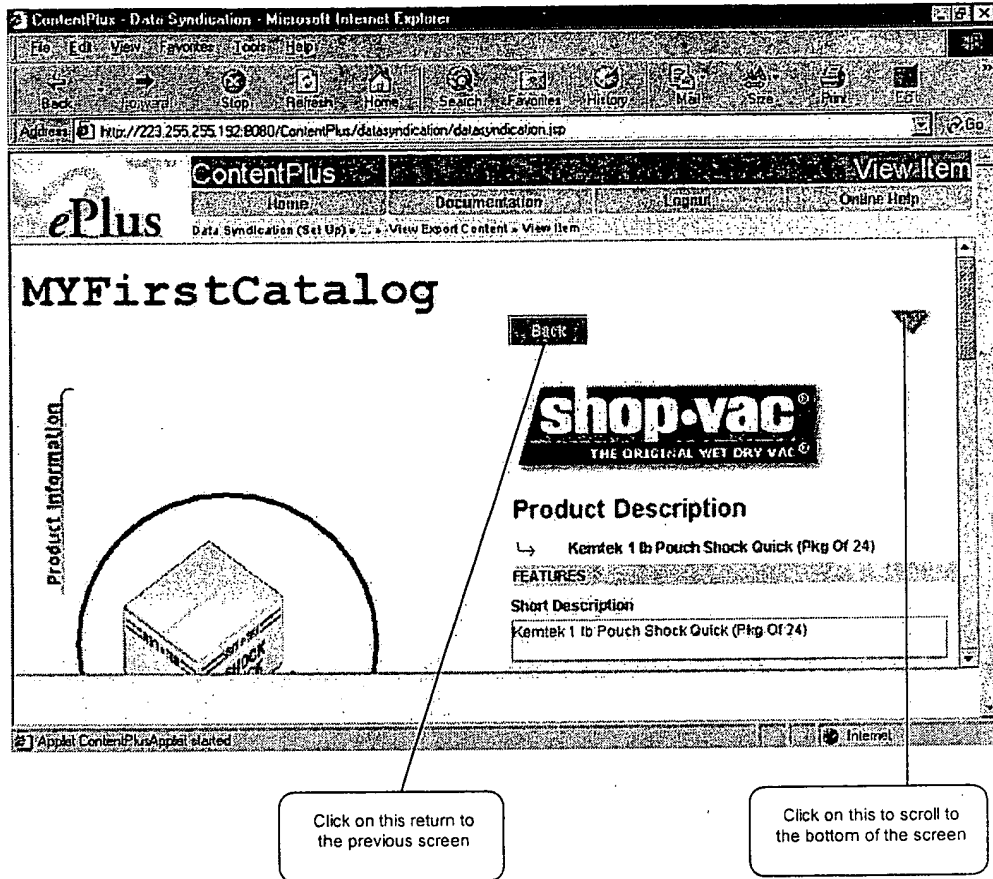
8. Click on the **Down Arrow** icon to scroll to the bottom of the screen. Similarly click on the **Up Arrow** icon to scroll to the top of the screen.

9. Click on the **Back** button to return to the the View Export Content screen.

10. In View Export Content screen click on the **Back** button to return to the Data Syndication (Set Up) screen.

11. Click on the **Select Mapping Item Template** button , the Select Item Mapping Template dialog box will appear.

Click on this to select the mapping template

Click on this to return to the previous screen
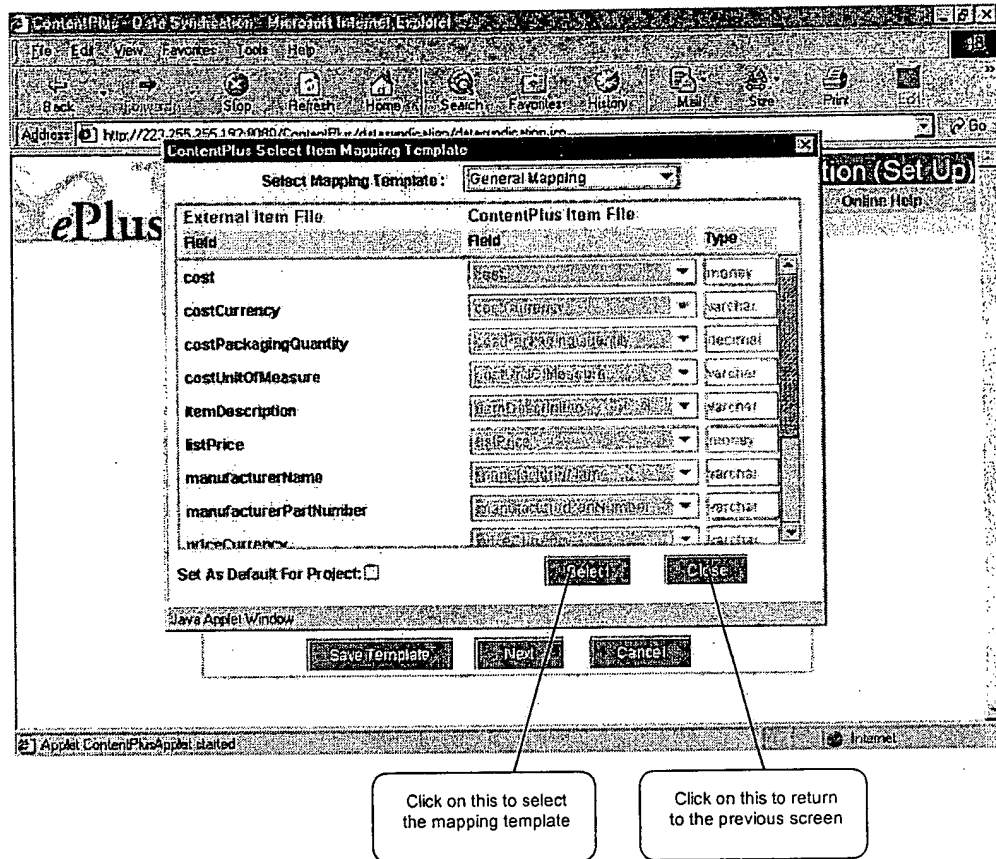
12. From the **Select Mapping Template** drop-down list, select the mapping template. The corresponding item mapping information will be displayed as shown above.

13. Click on the **Select** button, to select the mapping template and return to the Data Syndication (Set Up) screen.

14. Click on the **Close** button, to return to the Data Syndication (Set Up) screen without selecting the mapping template.

15. In case, a new item mapping is to be defined, click on the **New Mapping Item Template** button. The New Outgoing Item File Format screen will be displayed.

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| Click on this to return to the previous screen | Click on this to go to the next screen | Click on this to cancel the current operation and return to previous screen | Click on this to display the File DB List |
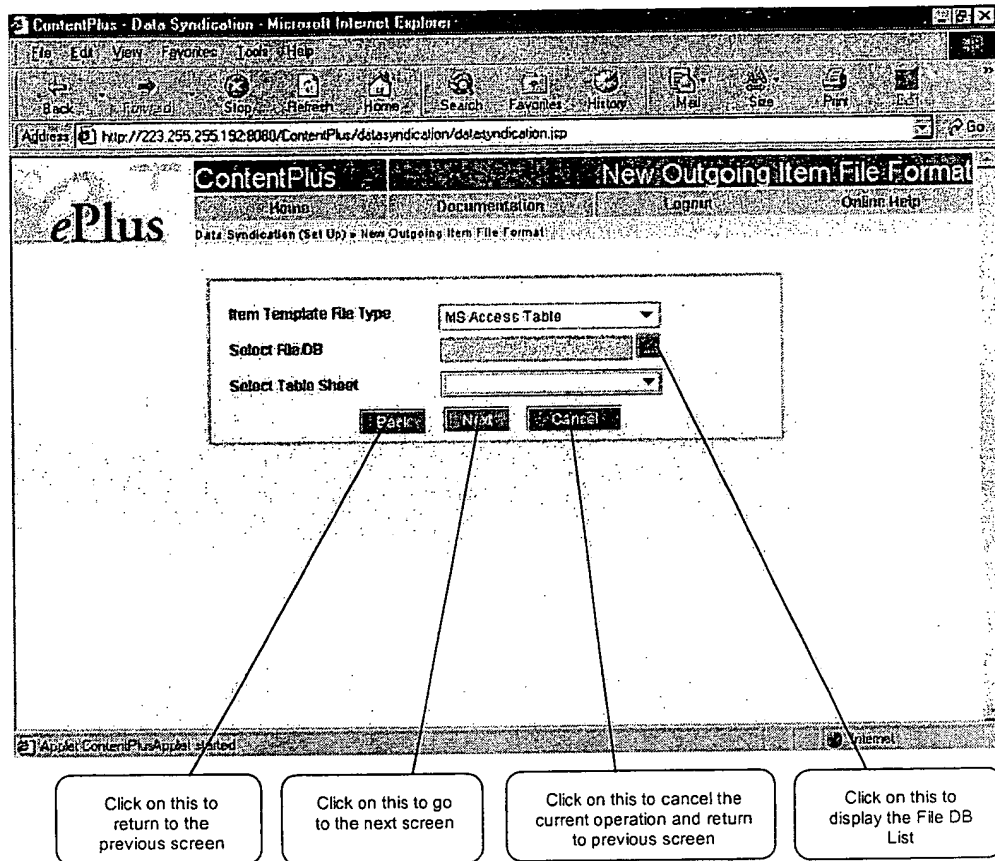
16. From **Item Template File Type** drop-down list, select the template file format. You may select from any one of the four file formats viz. MS Access (.MDB), MS Excel (.XLS), Comma Separated (.CSV), and XML (.XML).

17. Click on the **Select File/DB** button, the **Select Data Source** dialog box will appear. The dialog box will show a list of files based on th e selected file format.

Click on this to select the data source file

Click on this to close the dialog box
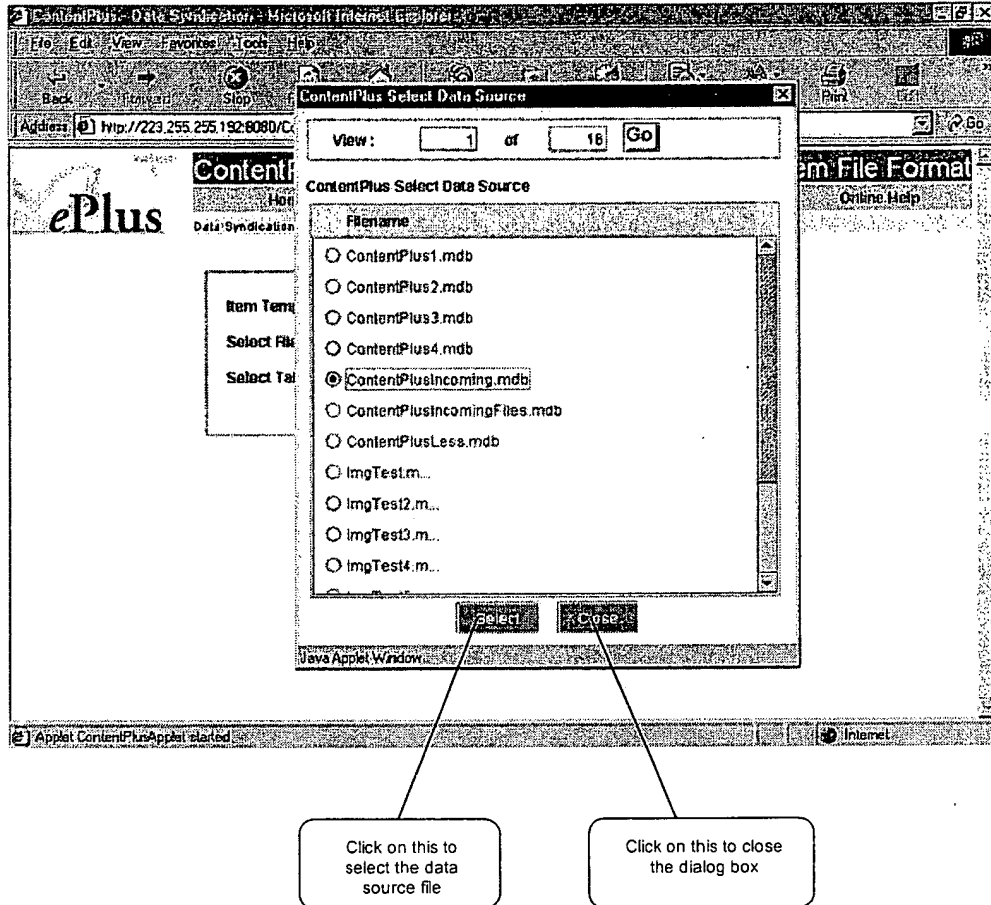
18. Select the data source file containing the items to be exported. Click on the **Select** button, this will select the data source file and return to the New Outgoing Item File Format screen.

19. Click on the **Close** button, to return to the New Outgoing Item Format screen without selecting the data source file.

20. From the **Select Table/Sheet** drop-down list, select the appropriate table or sheet containing the items

21. In New Outgoing Item File Format screen click on the **Cancel** button to return to the Home page. Clicking on the **Back** button will return to the Data Syndication (Set Up) screen.

22. Click on the **Next** button to proceed to the Map Outgoing Item File screen.

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Click on this to return to previous screen

Click on this save this in a mapping template

Click on this to return to home page

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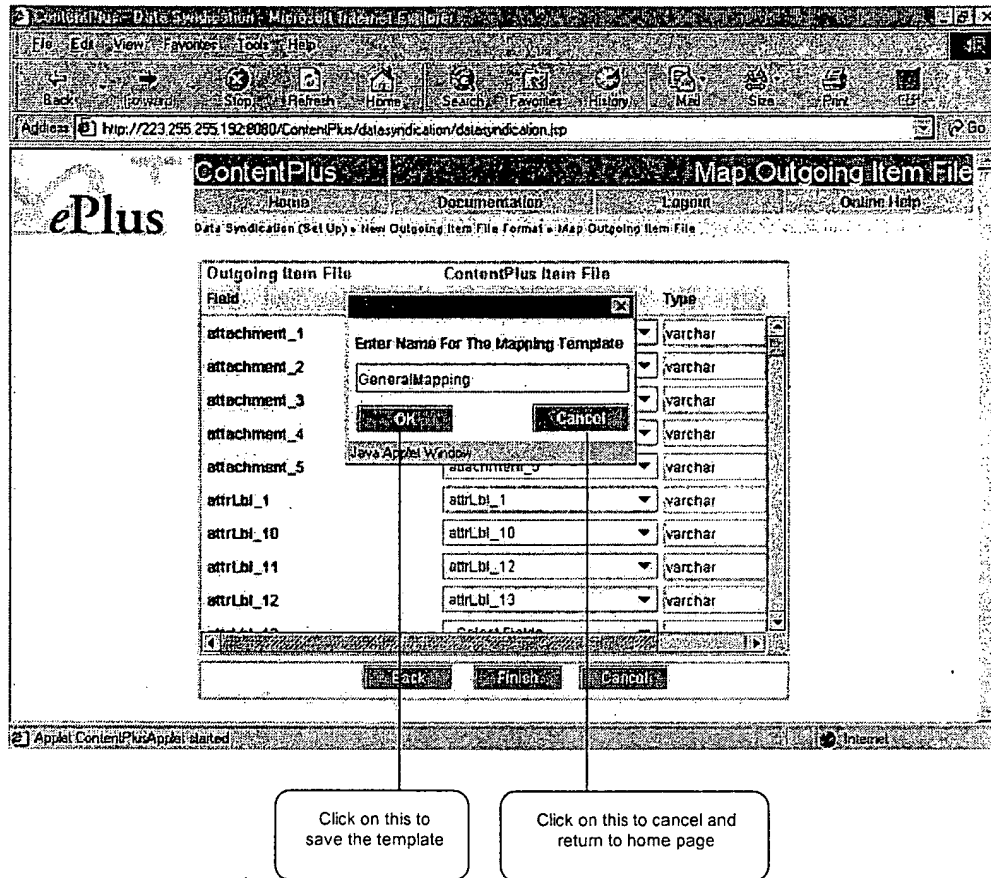
23. Map each field of the outgoing template with the standard ContentPlus Item File fields.

24. Click on the **Finish** button, **Enter Name For The Mapping Template** dialog box will appear.

25. In the **Enter Name For The Mapping Template** field, enter a name for the mapping template. Click on the **OK** button, to return to the Data Syndication (Set Up) screen. Click on the **Cancel** button, the dialog box will be cleared and you can change the mappings if required.

26. In Map Outgoing Item File screen click on the **Cancel** button to return to the Home page. Click on the **Back** button will return to the New Outgoing Item File Format screen.

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27. Click on the **Select Mapping Schema Template** button, the Select Schema Mapping Template dialog box will appear.

Click on this to select the mapping template

Click on this close the dialog box
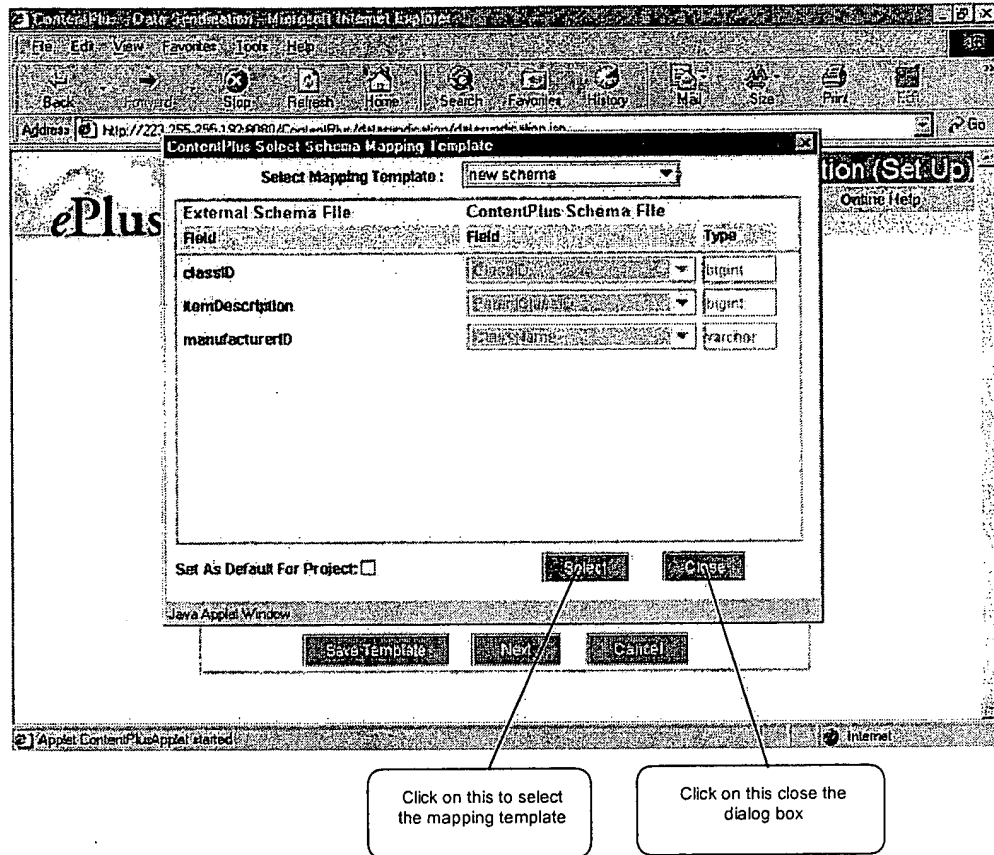
28. From the **Select Schema Mapping Template** drop-down list, select the mapping template. The corresponding schema mapping information will be displayed as shown above.

29. Click on the **Select** button, this will select the schema mapping template and return to the Data Syndication (Set Up) screen.

30. The **Close** button will return to the Data Syndicatio n (Set Up) screen without selecting the mapping template.

31. In case, a new schema mapping is to be defined, click on the **New Mapping Schema Template** button, to proceed to New Outgoing Schema screen.

| Click on this to return to the previous screen | Click on this to proceed to next screen | Click on this to cancel the current operation and return to previous screen | Click on this to display the File DB List |
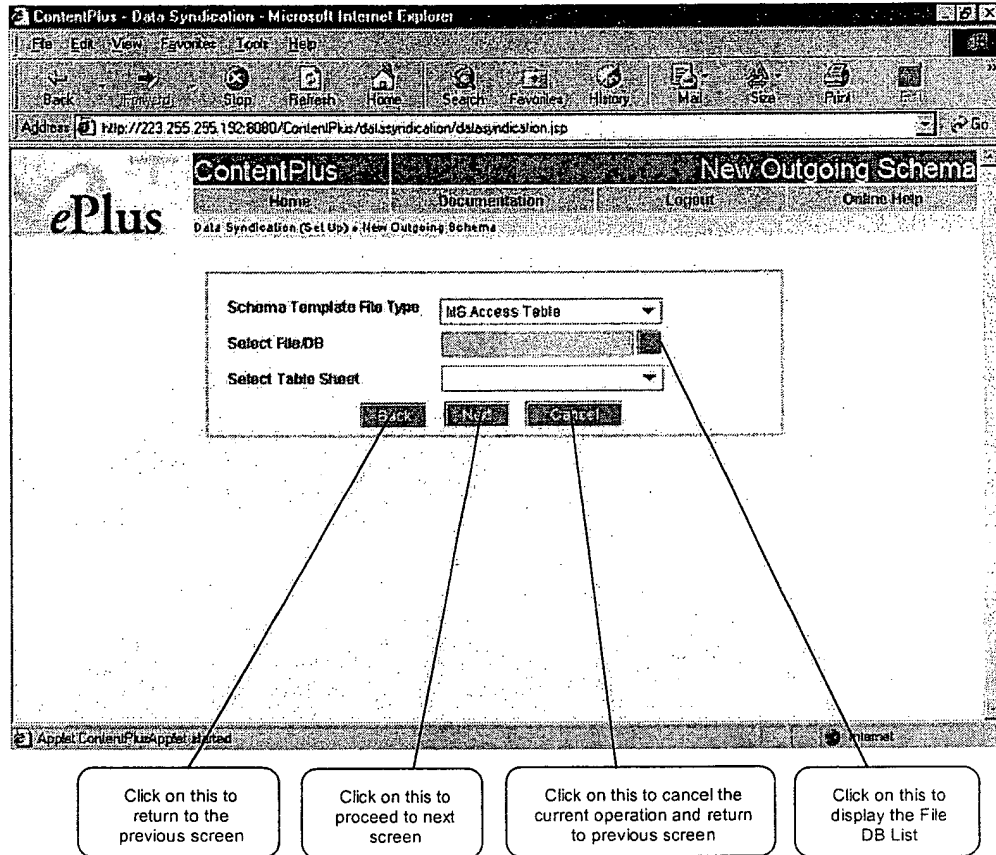
32. From **Schema Template File Type** drop down list, select the schema template file type. You may select from any one of the four file formats viz. MS Access (.MDB), MS Excel (.XLS), Comma Separated (.CSV), and XML (.XML).

33. Click on the **Select File OB** button, the **Select Data Source** dialog box will be displayed. The dialog box will show a list of files based on the selected file format.

Click on this to select the data source file

Click on this to close the dialog box
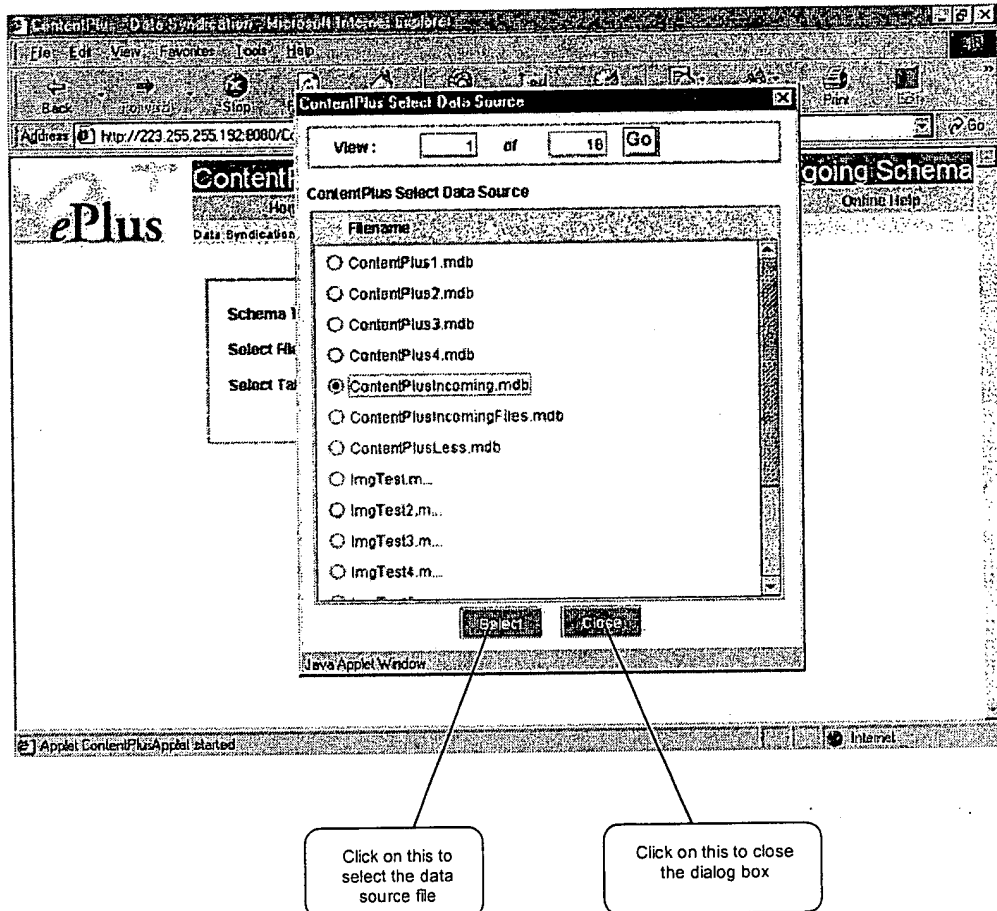
34. Select the data source file containing the schema definition to be exported. Click on the **Select** button, this will select the data source file and return to the New Outgoing Schema screen.

35. Click on the **Close** button, to return to the New Outgoing Schema screen without selecting the data source file.

36. From the **Select Table/Sheet** drop-down list, select the appropriate table or sheet containing the items

37. In New Outgoing Schema screen click on the **Cancel** button to return to the Home page. Click on the **Back** button will return to the Data Syndication (Set Up) screen.

38. Click on the **Next** button to proceed to the Map Outgoing Schema File screen.

39. Map each field of the external schema file with ContentPlus schema file fields.

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| Click on this to return to previous screen | Click on this to save the mapping template | Click on this to return to home page |

Click on this to save
the mapping template

Click on this to cancel the
current operation and return
to previous screen

40. Click on the **Finish** button, **Enter Name For The Mapping Template** dialog box will appear.

41. In the **Enter Name For The Mapping Template** field, enter a name for the mapping template. Click on the **OK** button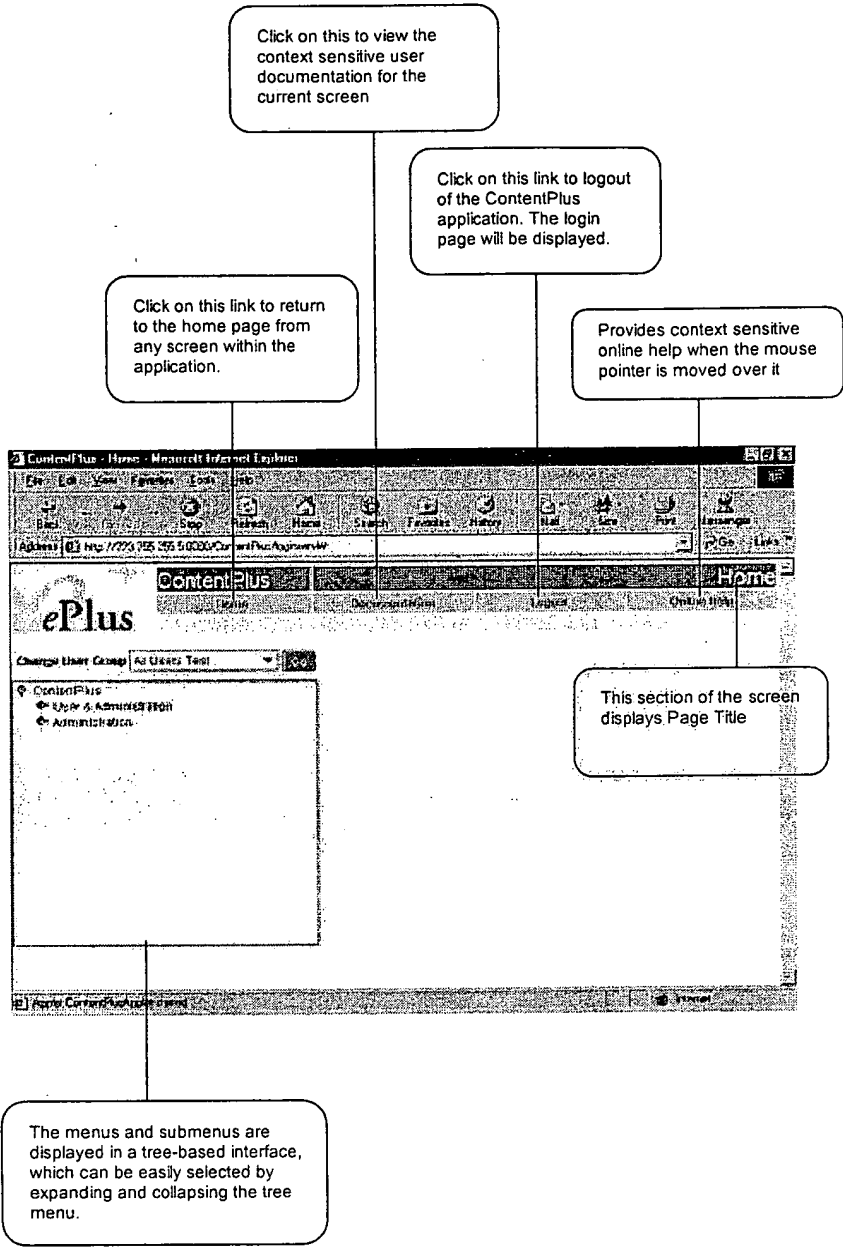, you will return to the Data Syndication (Set Up) screen. Clicking on the **Cancel** button, the dialog box will be cleared and you can change the mappings if required.

42. In Map Outgoing Schema File screen click on the **Cancel** button to return to the Home page. Click on the **Back** button will return to the New Outgoing Schema screen.

43. From the **Export File Type** drop-down list, select the export file format. You may select from any one of the four file formats viz. MS Access (.MDB), MS Excel (.XLS), Comma Separated (.CSV), and XML (.XML).

44. In the **Export File Name** field, enter the export file name.

45. Select **Syndicate Synonym** checkbox, if synonyms must be syndicated.

46. Select **Syndicate Pricing Information** checkbox, if pricing information must be syndicated.

47. From the **Select User Group For Price Markup** drop-down list, select the user group for which the price markup information must be syndicated.

48. Click on **Save Template** button, **Enter Name For The Syndication Template** dialog box will appear.

Click on this to save the syndication template

Click on this to cancel the current operation and return to previous screen
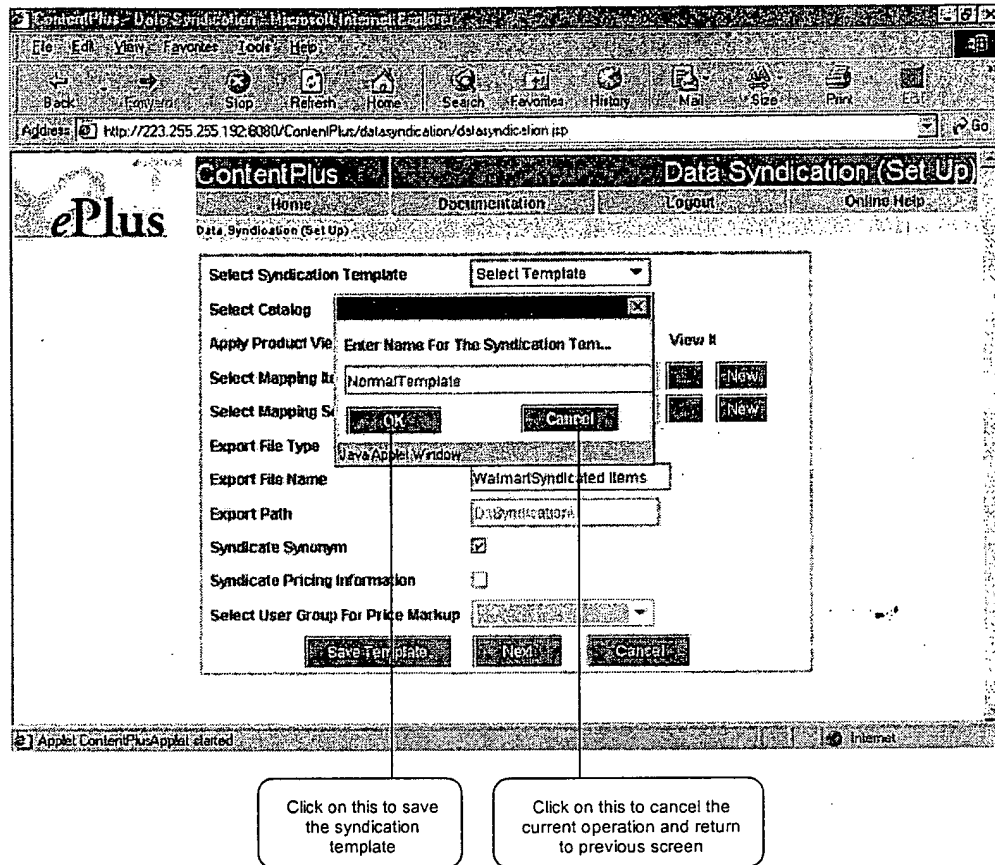
49. In the **Enter Name For The Syndication Template** field, enter a name for the syndication template. Click on the **OK** button, you will return to the Data Syndication (Set Up) screen. Click on the **Cancel** button, the dialog box will be cleared and you can change the data syndication setup.

50. In Data Syndication (Set Up) screen, click on the **Cancel** button to return to the home page.

51. Click on the **Next** button to proceed to Replace Outgoing Words screen.

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Click on this to undo the last activity

Click on this to reset the screen

Click on this to view saved pairs

Click on this to return to previous screen

Click on this to save the replace outgoing words

Click on this to proceed to next screen

Click on this to return to the home page

Build a literal pattern for input string

Build a literal pattern, consisting of the complete selected text

Append a space to the current pattern

Build a numeric pattern, for input string

Build the pattern string, comprising of a wildcard character at the specified position

Build the pattern string, comprising of a wildcard characters starting from the specified position

Split the pattern at the current cursor position

52. On this screen, define incoming patterns and outgoing patterns for selected fields from the **Find and Replace In** li st. During export the selected field values will be replaced with outgoing patterns if they contain input patterns.

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The matching of input patterns in the field value is influenced by the delimiters that are specified in the **Delimiters** field.

53. Click on the **Undo** button to undo the last activity. Clicking on **Reset** button will reset the screen.

54. Click on the **Save** button to save the find and replace word pairs.

55. Click on the **View Saved Pairs** button to view saved word pairs.

Click on this to delete the selected saved word

Click on this to apply the selected saved pair to the current selection

Click on this to return to the previous screen
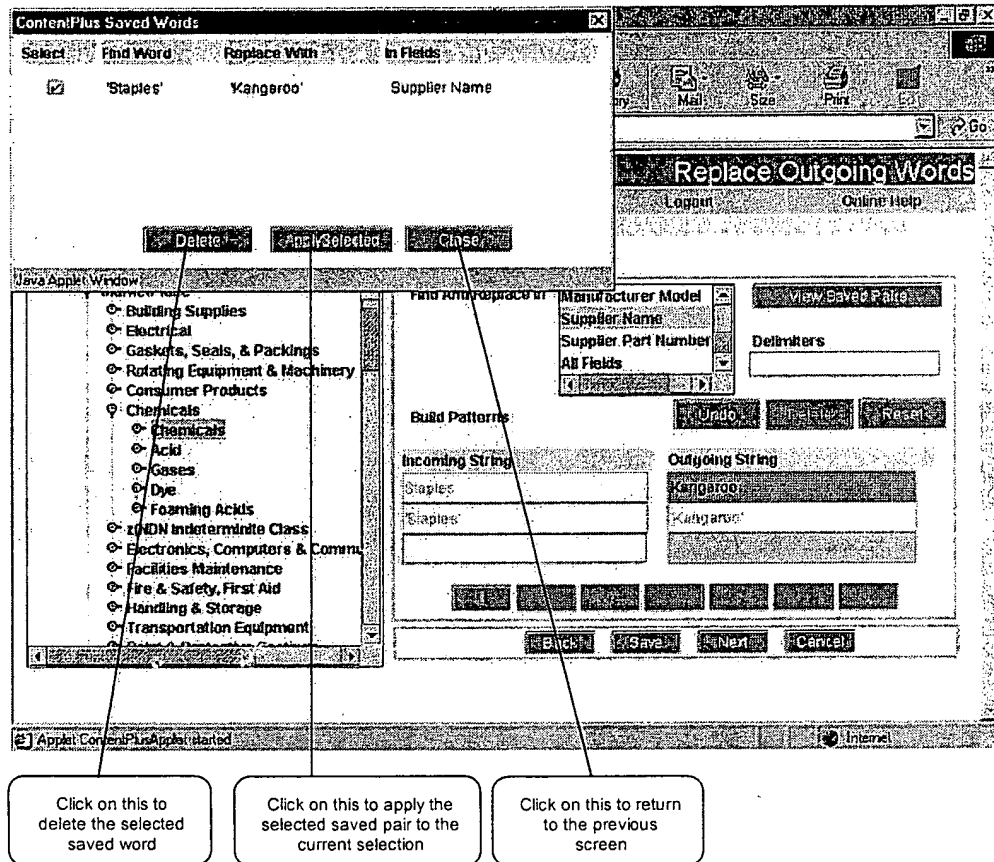
56. To delete specific saved word(s), select the respective pair from **Saved Word** screen, and click on the **Delete** button.

57. Click on the **Apply Selection** button, to select the save word to be applied to the current selection.

58. Click on the **Close** button, to return to the Replace Outgoing Words screen.

59. In Replace Outgoing Words screen click on the **Back** button to return to the Data Syndication (Set Up) screen. Click on the **Cancel** button to return to the home page.

60. Click on **Next** button to proceed to the Select Export Type screen.

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Click on this to go to
View Delta Exports
screen

Click on this to go
to View Full Exports
screen

Click on this to return to
the previous screen

Click on this to start
the syndication
process

Click on this to return
to the home page
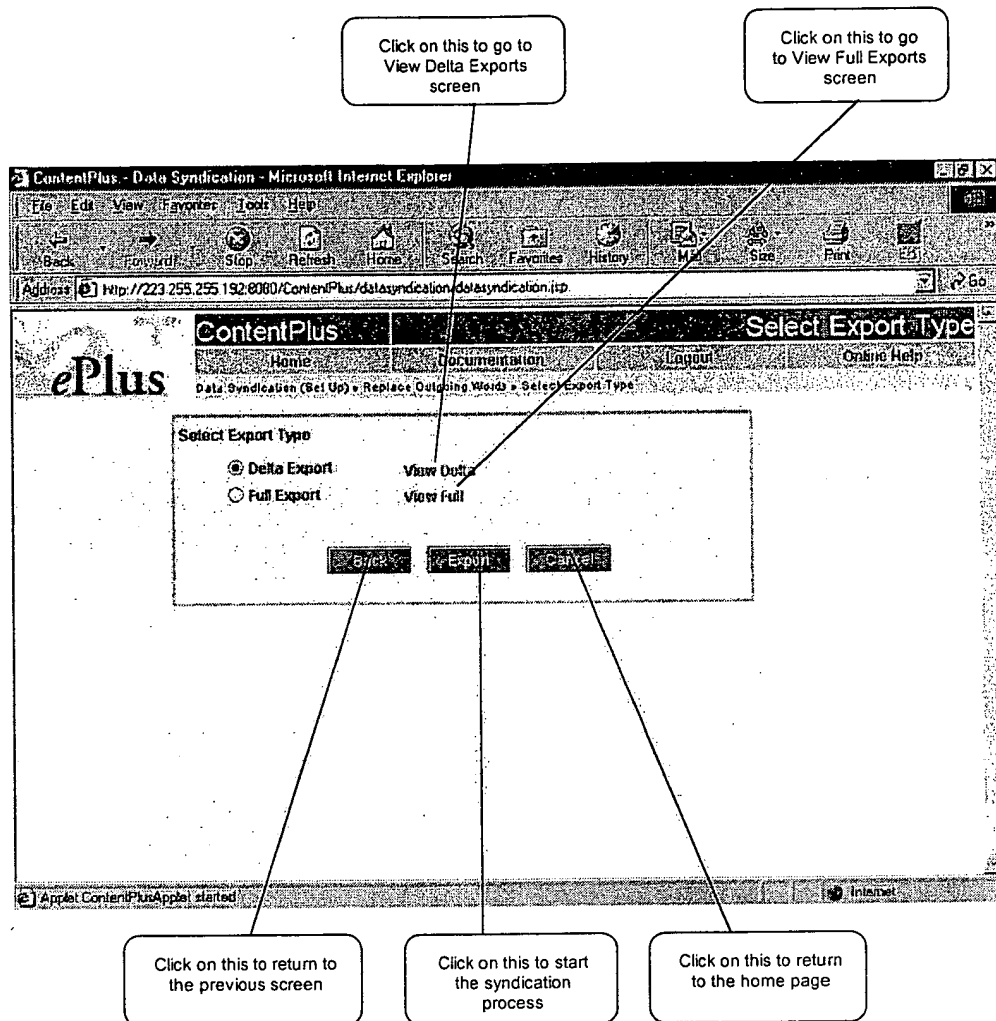
61. Delta export will export new and modified items only. A complete export will export all the items.

62. Click on the **View Delta** link, the View Delta Export screen will be displayed. The View Delta Export screen will display the count of unchanged items, new items and modified items. During delta exports, selected items for the product view will be compared against a previous export of the same product view.

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63. Click on the **Unchanged Items** link, the Unchanged Items screen will be displayed.

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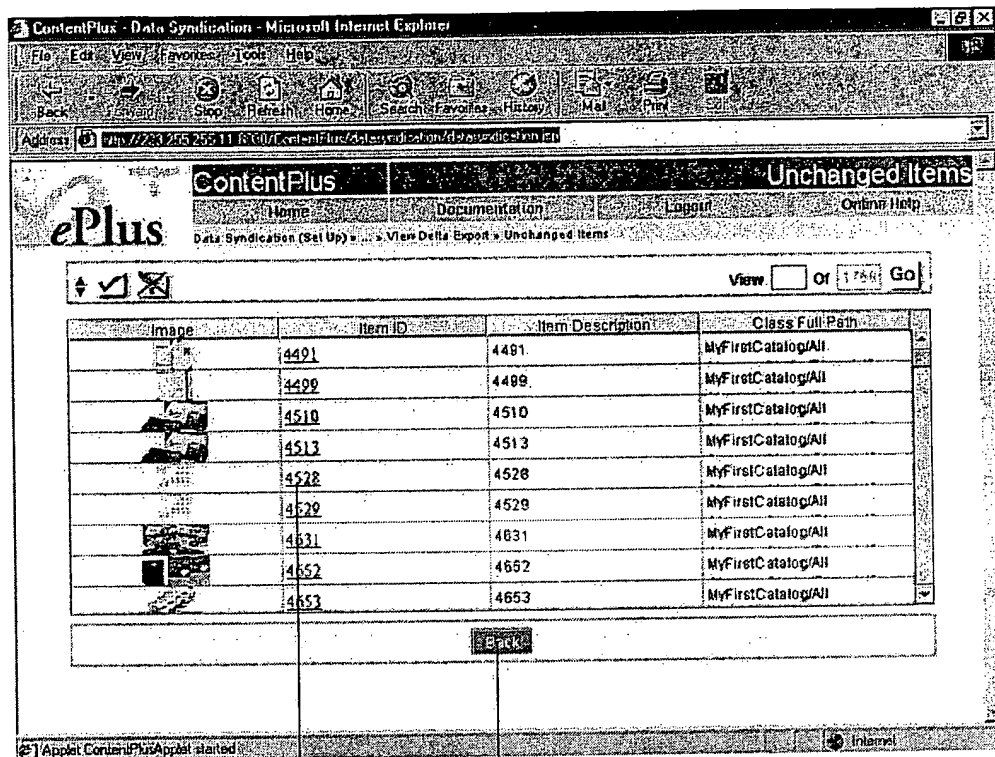

Click on this to View the Item Details

Click on this to return to the previous screen

64. Click on the **Item ID** link, to view the item details. Click on **Back** button to return to View Delta Export screen.

65. Click on the **Modified Items** link, the Modified Items screen will be displayed.

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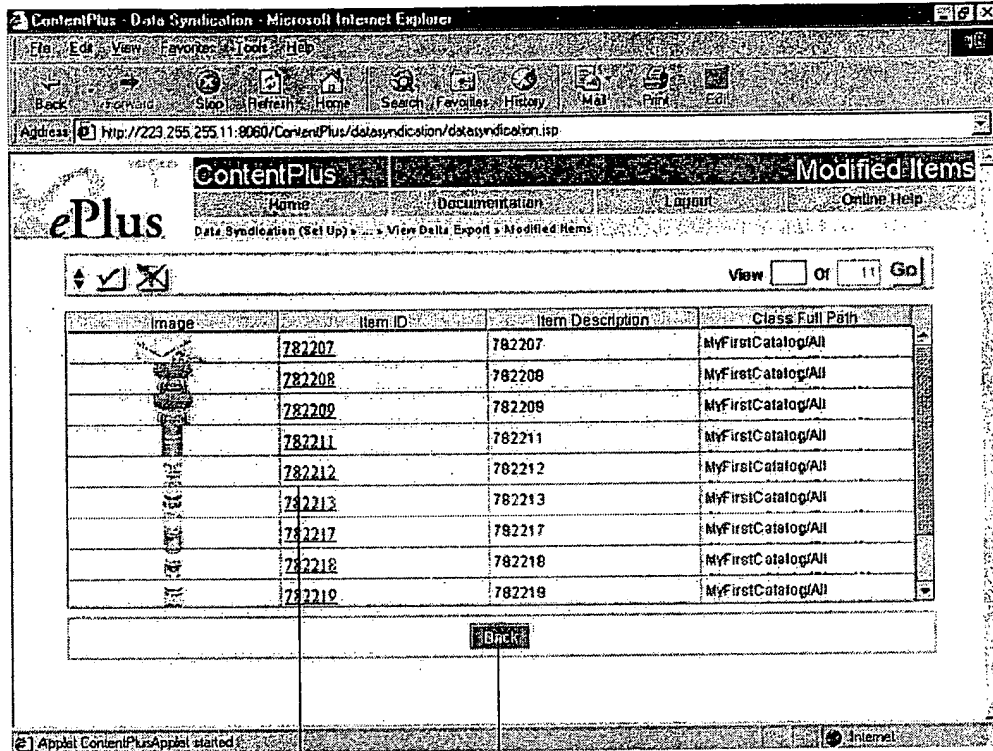
Click on this to view
the Item Details

Click on this to return to
the previous screen

66. Click on the **Item ID** link, to view the item details. Click on **Back** button to return to View Delta Export screen.

67. Click on the **New Items** link, the New Items screen will be displayed.

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Click on this to view the Item Details

Click on this to return to the previous screen

68. Click on the **Item ID** link, to view the item details. Click on **Back** button to return to View Delta Export screen.

69. In the View Delta Export screen, click on **Back** button to return to Select Export Type screen.

70. In the View Delta Export screen, click on the **View Full** link. The View Full Exports screen will be displayed.

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Adjust Row Height

Click on this to select all the Items in the List

Remove the filter to display all records

Click to scroll to the record specified in the view field

Click on this to view the Item Details

Click on this to return to the previous screen
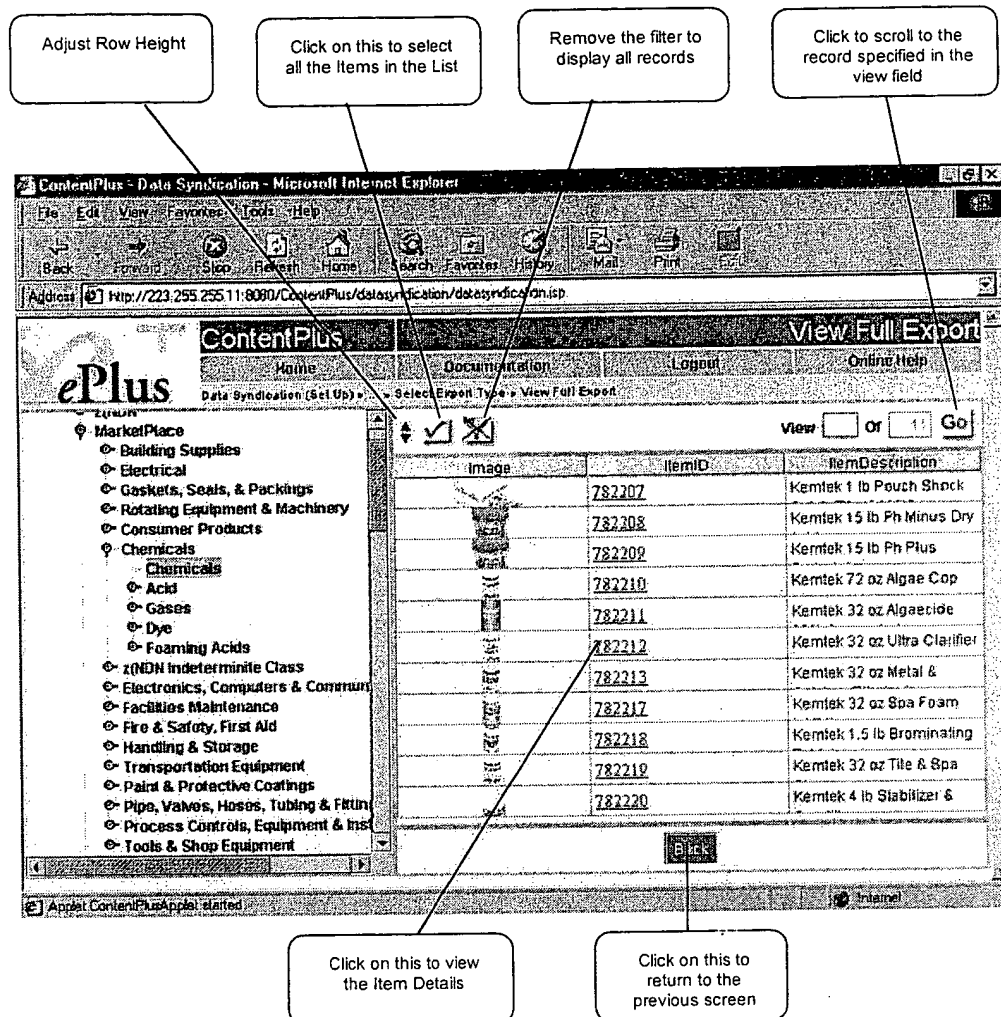
71. Select and expand the appropriate schema class in the left pane, to view the items under it. The list of items under the selected class will be displayed in the right pane.

72. Click on the **Item ID** link, to view the item details.

73. Click on the **Back** button to return to the Select Export Type screen.

74. In the Select Export Type screen, click on the **Back** button to return to the Replace Outgoing Words screen. Click on the **Cancel** button to return to the home page.

75. Select an appropriate export type before starting the syndication process. The delta export will export new and modified items only. A full export will export the entire catalog.

76. Click on the **Export** button to start the syndication process. On completion of the syndication process, the Export Report screen will be displayed. The A Export report displays the export related information including the locations of the export files for item, schema, images, synonyms etc.

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Click on this to return
to Home Page
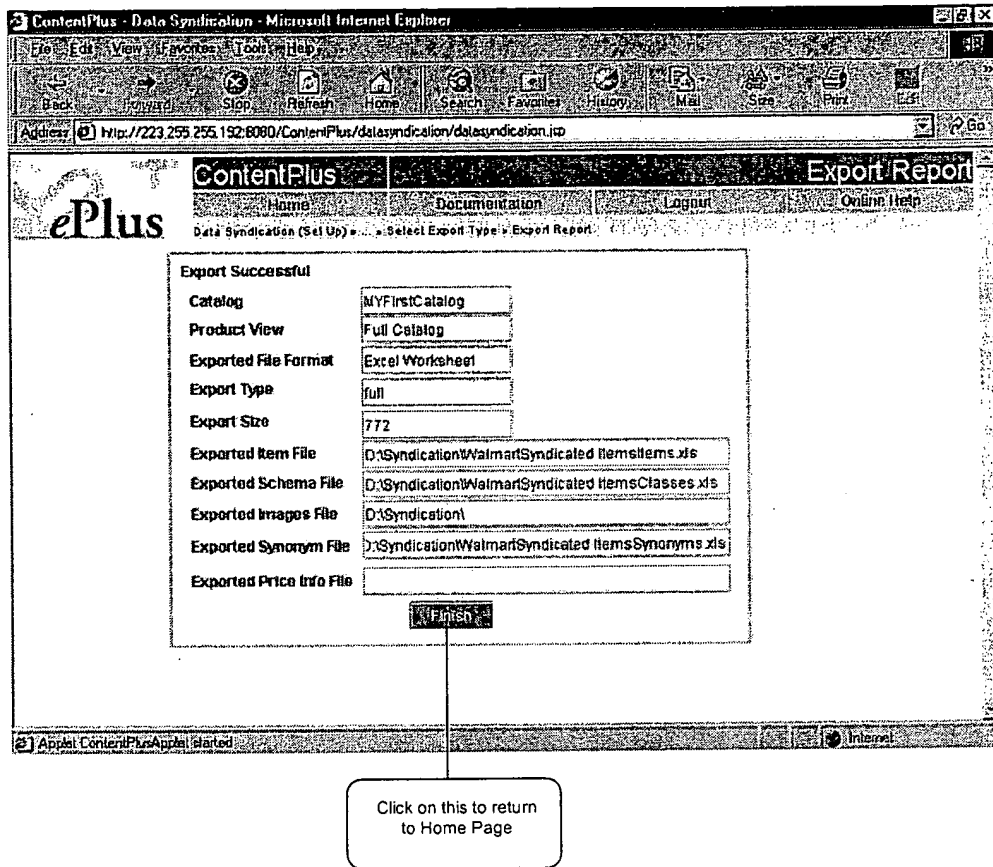
77. Click on the **Finish** button to return to the home page.

3.2   List of Export Processes

1. Select Administration → Data Syndication → List of Export Processes in the tree menu on the home page. The List of Export Processes screen will be displayed as follows:

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Return to Home Page

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Return to previous screen

2. From the **Select Catalog** drop down box select the catalog name for which the export log is to be viewed.

3. Click on the **Printer Friendly Report** icon to print the report of the import log displayed currently.

4. Click on the column heading to sort the list in ascending order of the clicked column. Click on the same column heading again, will sort the list in descending order.

5. Double click inside a cell, drag the mouse to select the text, and right -click on the cell. A popup menu will appear with two options, which can be used to filter the current list containing the text or not containing the text in the respective column.

6. Click on the **Cancel** button to return to the home page.

APPENDIX V – IMPORT EXTERNAL SCHEMA

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1 Introduction

1.1 Welcome to ContentPlus

ContentPlus, is a robust, easy-to-use rich content creation and management application that provides users with the ability to:

❑ Create a standard rich content database with referencing schema of classification.

❑ Maintain classification schema and items by addition, modification or deletion.

❑ Import classification schema and rich content data from different sources.

❑ Optimize Content and Product Views based on User Profiles and Shopper Groups.

❑ Manage Access Authorization and Security Levels for application and database.

1.2 System Requirements

ContentPlus is a web-based, browser-independent application. As a web-based application, ContentPlus requires the Java Runtime Environment (JRE), a standard browser and access to the Internet.

As a browser-independent application, ContentPlus can be accessed with a variety of standard browsers, including Microsoft Internet Explorer and N etscape Navigator. The following are the software and hardware requirements for using ContentPlus.

Software Requirements

❑ Java Runtime Environment v 1.4.0 or higher

❑ Internet Explorer v. 5.5 or higher
   -OR-
   Netscape Navigator v. 6.0 or higher

Hardware Requirements

❑ 800 x 600 pixels screen resolution

1.3 Contacting ePlus Content Services, Inc.

Refer to the following sections for information about contacting ePlus, inc. for customer support or sales information.

1.3.1 ePlus, Inc. Headquarters

ePlus, inc. is a leading provider of supply chain management solutions. From integrated financial services, to an end-to-end, web-based procurement application, to a comprehensive, web-based asset management application, to unparalleled client services, ePlus, inc. provides its rapidl y growing customer base complete supply chain management solutions.

Corporate Headquarters

Address

ePlus, inc.. ,   ..-.. ·

400 Herndon Parkway

Herndon, VA 20170

Telephone

1-703-264-0770

         -or-

1-800-827-5711

Office Hours

Monday to Friday

9:00 A.M. to 5:30 P.M. Eastern Standard Time

2   Getting Started

2.1   Logging into ContentPlus

Your ContentPlus System Administrator provides you the Uniform Resource Locator (URL) of your organization's ContentPlus site along with your ContentPlus login name and password.

Your login information is used to verify your access permissions and to control the functions you can see and perform in ContentPlus.

Logging into ContentPlus is easy. After you access the ContentPlus Login page, simply enter your login name and password.

2.1.1   Logging into ContentPlus Site

1. Launch your browser software, and type the URL of your organization's ContentPlus site. The ContentPlus login page for your organizations' site appears.

2. From the ContentPlus login page, in the **User ID** field, enter your ContentPlus site user id.

3. Similarly, in the **Password** field, enter your site password. The password will be encrypted and therefore it will show as asterisk '*'.

4. Click on the **Login** button. The ContentPlus home page, which is the central screen of ContentPlus appears.

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2.1.2 The ContentPlus Home Page

Logging into the ContentPlus site displays the ContentPlus home page. The home page provides access to a range of functions available in the application.

Note: The navigation button viz. Back, Forward, Refresh, Home etc. present on the browser's toolbar must not be used for navigation. Always ensure that the navigation buttons provided on the application interface are used to navigate within the application.

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Click on this to view the context sensitive user documentation for the current screen

Click on this link to logout of the ContentPlus application. The login page will be displayed.

Click on this link to return to the home page from any screen within the application.

Provides context sensitive online help when the mouse pointer is moved over it

This section of the screen displays Page Title

The menus and submenus are displayed in a tree-based interface, which can be easily selected by expanding and collapsing the tree menu.

3   Importing External Schema

Incoming schema definitions received in electronic format are imported and appended to the existing schema definition.

3.1   Import Schema

1. Select User & Administration → Data Aggregation → Import Schema in the tree menu on the home page. The Import Schema screen will be displayed as follows:

Click on this to proceed to Map Incoming Schema screen (if mapping template is selected). If the mapping template is not selected, Append Incoming Schema screen will appear

Click on this to return to the Home Page

1. From the **Select Project** drop-down list, select the Project into which the schema is to be imported.

2. From the **File Format** drop-down list, select the file format. You may select from any one of the four file formats viz. MS Access (.MDB), MS Excel (.XLS), Comma Separated (.CSV), and XML (.XML).

3. Click on **Select Data Source From Schema File** button, the Select Data Source dialog box will appear. The dialog box will show a list of files for the

selected file format. Select the data source file containing the schema to be imported.

Note: The data source files must be placed under a pre-defined folder on the web server prior to importing.

> Click on this to scroll to the data source file entered in the view field

ContentPlus Select Data Source   ☒

View :   [1] of [3] Go

ContentPlus Select Data Source

Filename

○ IncomingRawContentMDB.mdb

◉ IncomingSchemaFileMDB.mdb

○ IncomingSynonymFileMDB.mdb

Select   Close

> Click on this to select the Data Source file and return to Import Schema screen

> Click on this to return to Import Schema screen without selecting the Data Source File

4. After selecting the schema file, click on the **Select** button, you will return to the Import Schema screen.

5. Click on the **Close** button, will return to the Import Schema screen without selecting the Data Source file.

6. From the **Select Table/Sheet (Access / Excel)** drop-down list, select the appropriate database table or excel sheet containing the schema.

7. Click on the **Select Data Source For Synonyms File** button, the Select Data Source dialog box will appear. Select the data source file containing the synonyms to be imported
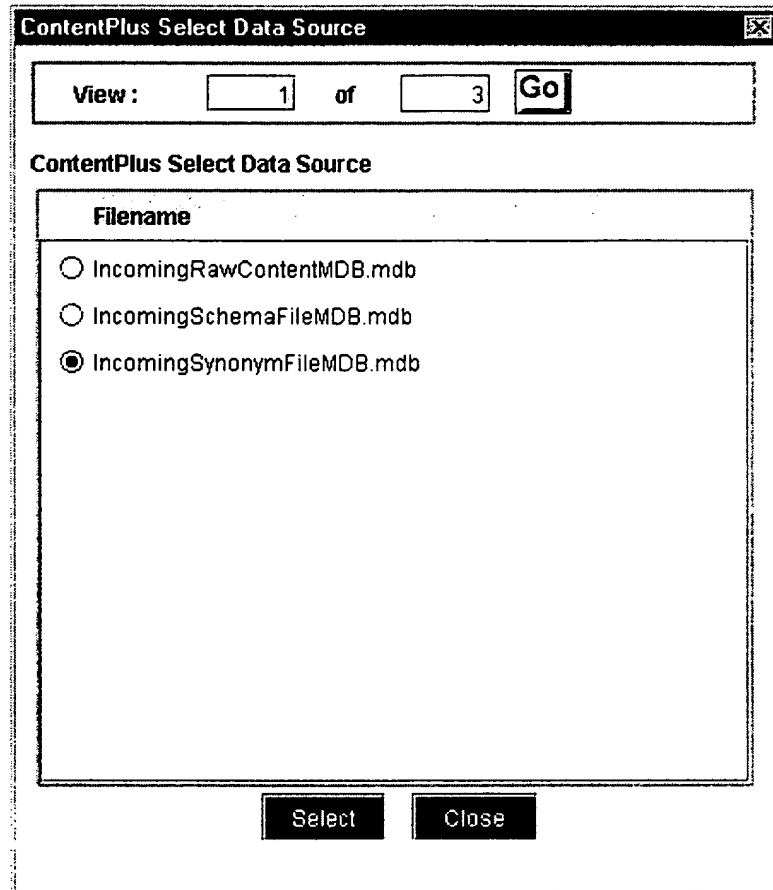
8. After selecting the synonym file, click on the **Select** button, you will return to the Import Schema screen.

9. Click on the **Close** button, will return to the Import Schema screen without selecting synonym file.

10. In the **Select Table/Sheet (Access / Excel)** field, select the database table or excel sheet containing the synonyms.

11. Click on the **Select Mapping Template** button, the Select Schema Mapping Template dialog box will appear.

12. In the **Select Mapping Template** field select the template. All the fields, which were mapped in the mapped template, will appear as given below.

13. Click on check box **Set As Default For Project** field. When this field is checked, the selected mapping template will become the default mapping template for the current project during Import Schema. Click on the **Select** button, to select the mapping template for importing the schema.

14. Click on **Close** button, will return to the Import Schema screen without selecting an existing mapping template.

15. Click on the **Next** button. If a mapping template is not selected, then Map Incoming Schema screen will appear, else the Append Incoming Schema screen will be displayed.

3.2   Map Incoming Schema

1. Map the required external schema file fields with the appropriate ContentPlus Schema file fields, by selecting them from the drop -down list. Class ID, Class Name and Parent ID are mandatory mapping fields.

2. Click on the **Next** button, the **Enter Name For The Mapping Template** dialog box will appear.

Click on this to save the mapping information under the specified Mapping Template Name

Click on this to return to Map Incoming Schema File screen for modification

Click on this to return to Import Schema screen

Click on this to save the mapping template and proceed

Click on this to return to Home Page
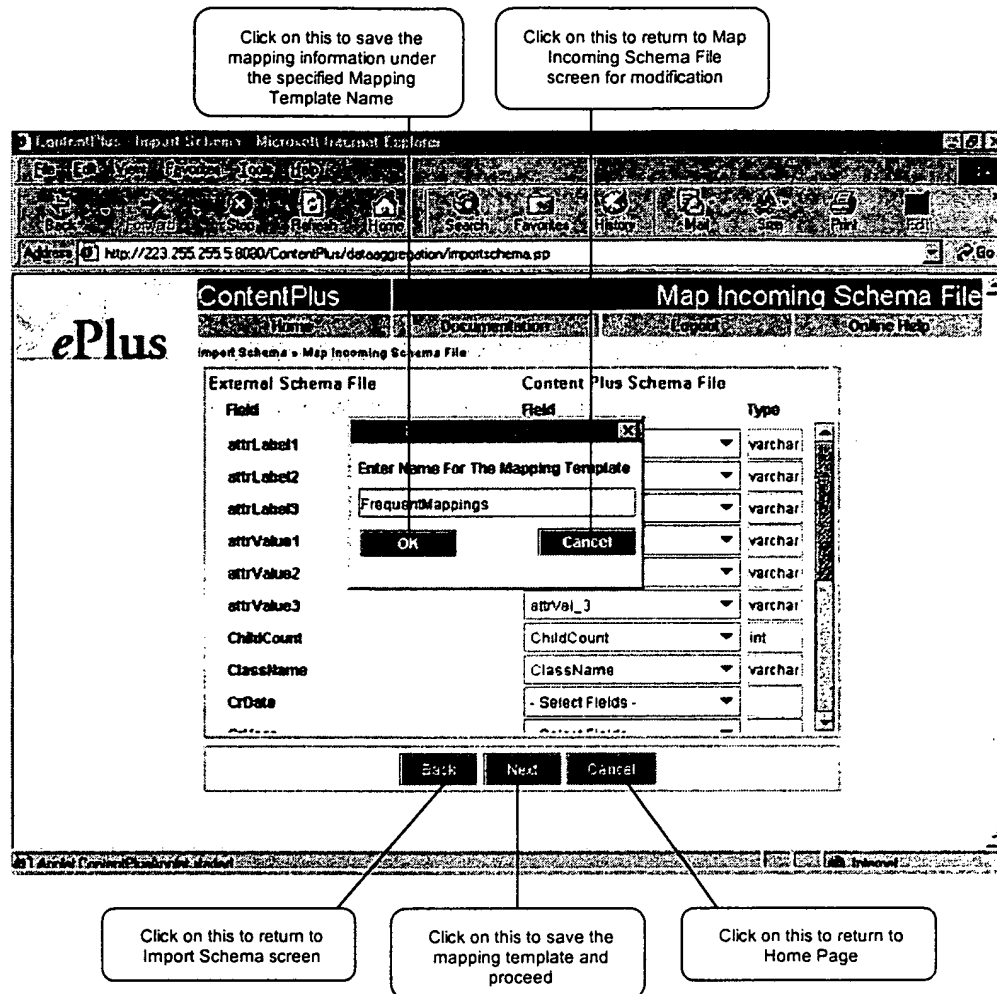
3. In the **Enter Name of Mapping Template** field, enter a name for the mapping template. Click on the **OK** button, the Append Incoming Schema screen will appear.

4. Click on the **Cancel** button, the dialog box will be cleared and you change the mappings if required.

3.3   Append Incoming Schema

1. The incoming schema and the content plus schema will be displayed in a tree-like interface. You can expand these trees to display the schema classes.

Click on this to return to Import Schema or Map Incoming Schema screen	Click on this to copy the incoming schema to an existing schema.	Click on this to import the schema and return to Home Page
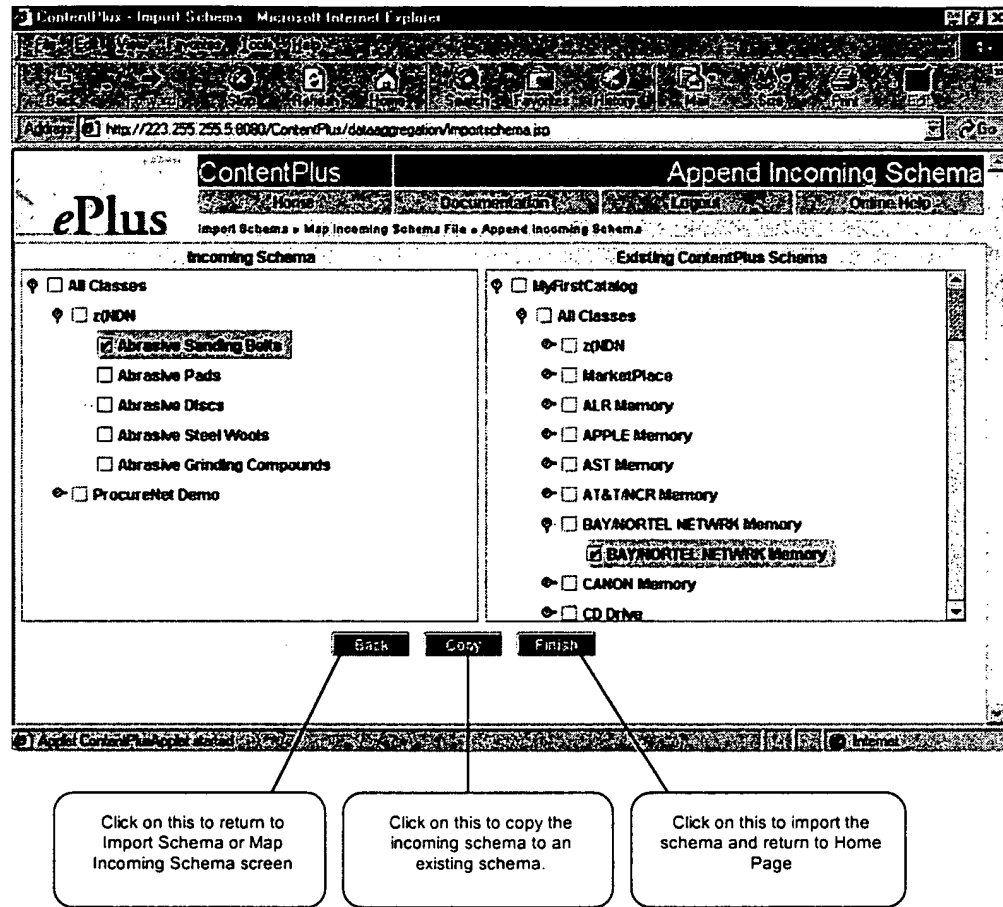
2. In the **Incoming Schema** section, select a schema class to be appended to the existing ContentPlus Schema.

3. In the **Existing ContentPlus Schema** section, select a schema class to which the incoming schema is to be appended.

4. Click on the **Copy** button. The message *"Successfully transferred Selected Class"* will appear. Click on **OK** button to clear the message. The Selected Incoming Schema Class will be appended to the Existing ContentPlus Schema.

5. Alternatively, you can drag-and-drop an incoming schema class onto the existing ContentPlus schema class to which it must be appended. The message *"Object dragged from a valid node in incoming schema tree to a valid node in ContentPlus Tree"* will appear. Click on **OK** button to clear the message. Again the message *"Successfully transferred Selected Class"* will appear. Click on **OK** button to clear the message. The dragged incoming schema class will be appended to the existing ContentPlus schema.

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6. Click on the **Finish** button, a message *"Finished Import Schema process"* will be displayed. This will import the incoming schema and you will return to the home page.

7. Click on the **Back** button, you will return to the Import Schema screen.

APPENDIX VI – SCHEMA MANAGEMENT

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1   Introduction

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unparalleled client services, ePlus, inc. provides its rapidly growing customer base complete supply chain management solutions.

Corporate Headquarters

Address

ePlus, inc.
400 Herndon Parkway
Herndon, VA 20170

Telephone

1-703-264-0770

   -or-

1-800-827-5711

Office Hours

Monday to Friday

9:00 A.M. to 5:30 P.M. Eastern Standard Time

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2.1.1 Logging into ContentPlus Site

1. Launch your browser software, and type the URL of your organization's ContentPlus site. The ContentPlus login page for your organizations' site appears.

2. From the ContentPlus login page, in the **User ID** field, enter your ContentPlus site user id.

3. Similarly, in the **Password** field, enter your site password. The password will be encrypted and therefore it will show as asterisk '*'.

ContentPlus – Schema Management User's Guide

4. Click on the **Login** button. The ContentPlus home page, which is the central screen of ContentPlus appears.

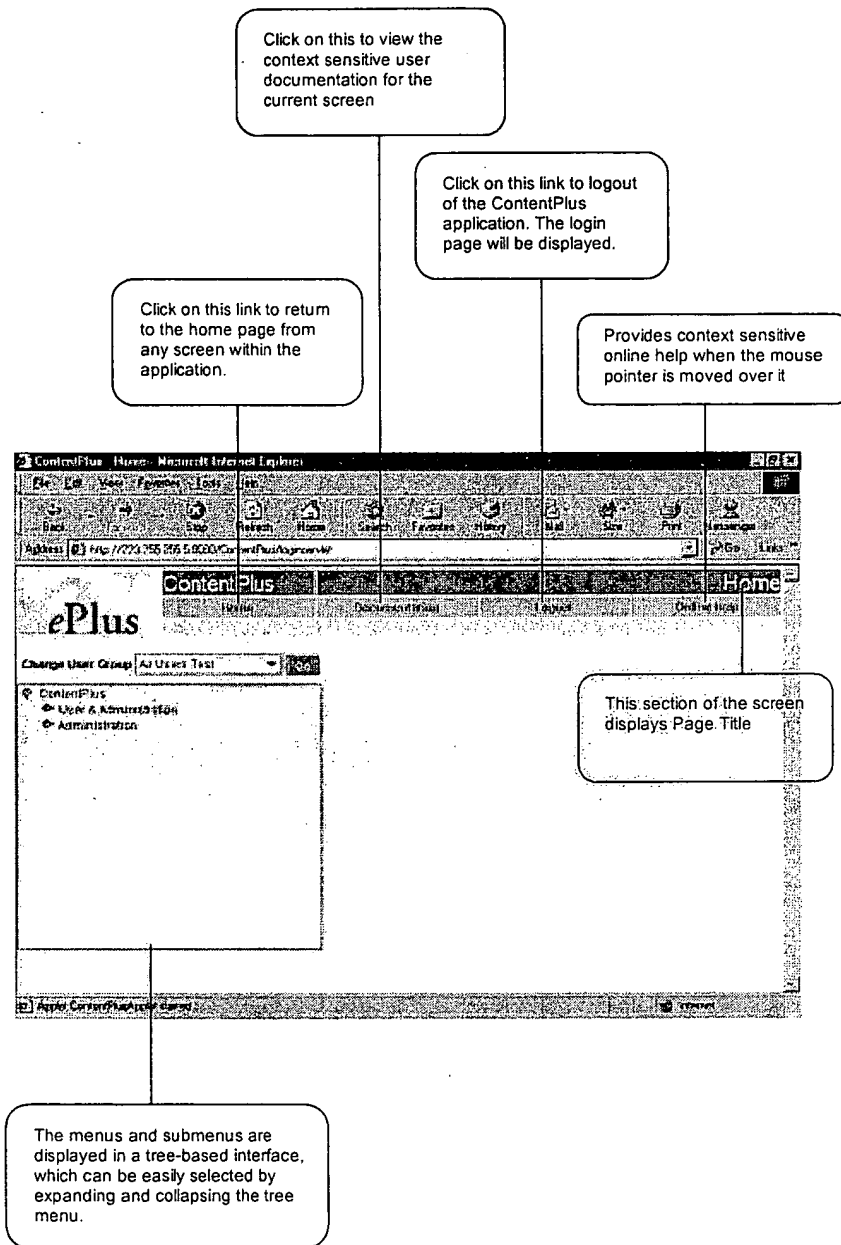

2.1.2   The ContentPlus Home Page

Logging into the ContentPlus site displays the ContentPlus home page. The home page provides access to a range of functions available in the application.

Note: The navigation button viz. Back, Forward, Refresh, Home etc. present on the browser's toolbar must not be used for navigation. Always ensure that the navigation buttons provided on the application interface are used to navigate within the application.

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Click on this to view the context sensitive user documentation for the current screen

Click on this link to logout of the ContentPlus application. The login page will be displayed.

Click on this link to return to the home page from any screen within the application.

Provides context sensitive online help when the mouse pointer is moved over it

This section of the screen displays Page Title

The menus and submenus are displayed in a tree-based interface, which can be easily selected by expanding and collapsing the tree menu.
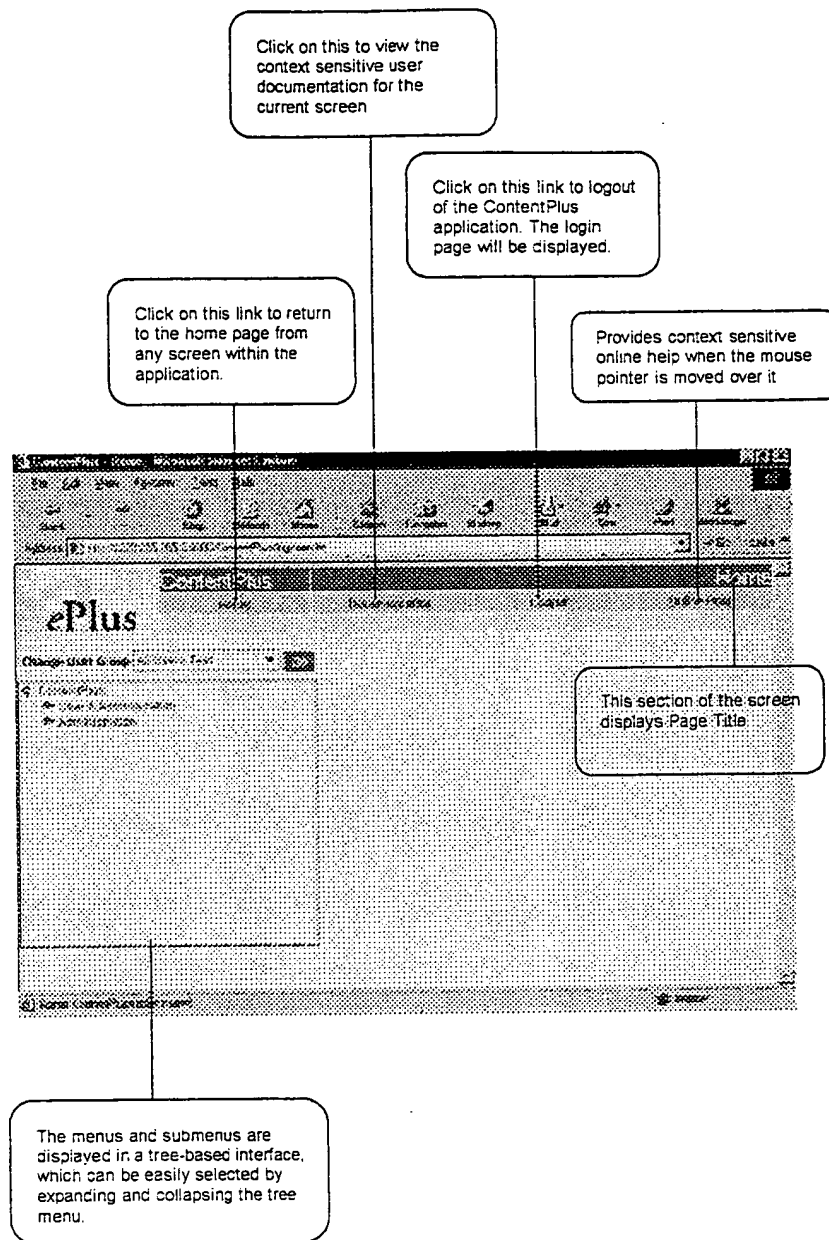
3   Schema Management (CLG)

For managing content in a collaborative, multi-user, multi-catalog environment, a "project" is defined per catalog. Upon creating a "project", the classification schema for the project can be defined as classes and sub-classes under it. Each class is defined in terms of attributes. A class inherits attributes from its parent. The following section describes the set of GUI Screens used to perform schema definition and maintenance functions.

3.1   Add New Project

1. Select User & Administration → CLG Processing → Schema Management → Define Schema in the tree menu on the home page. The Define Schema screen will be displayed as follows:

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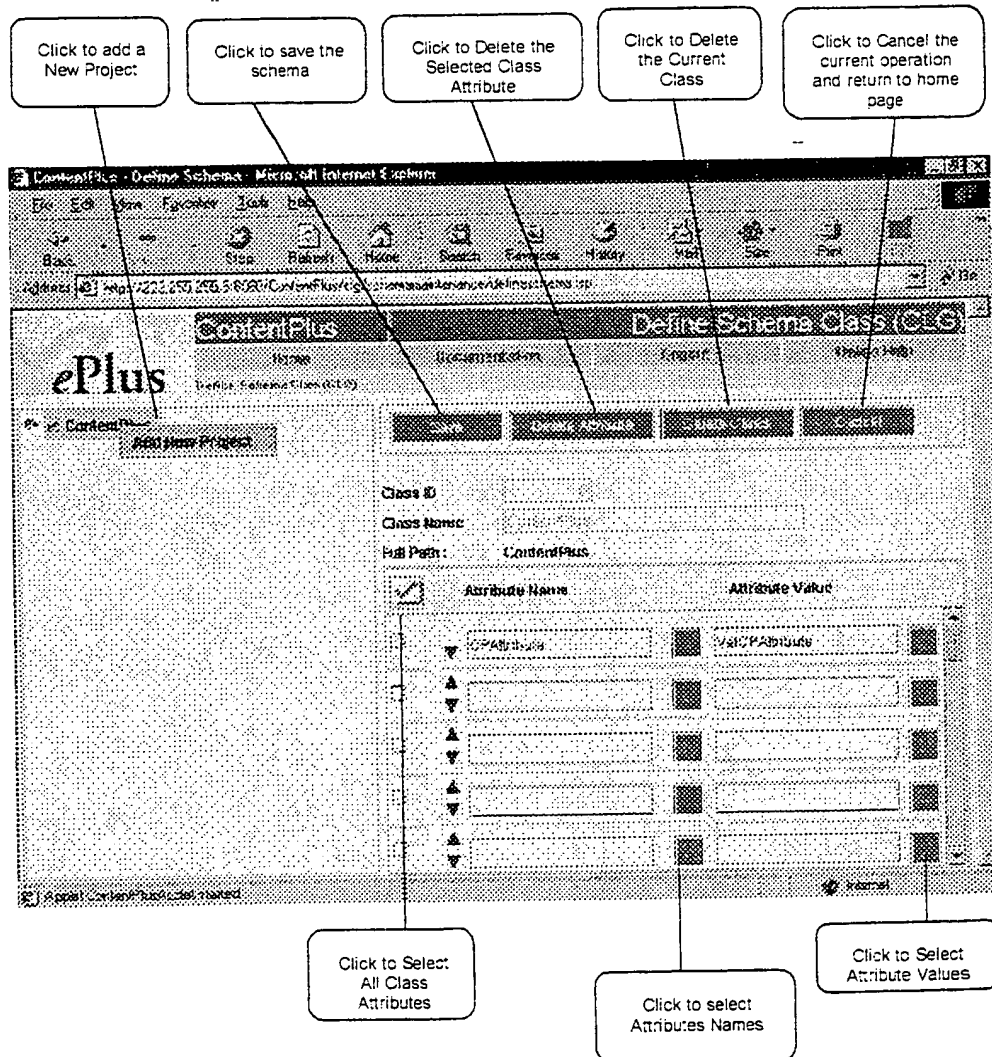
2. Select the root node in the left pane, right click and select **Add New Project** from the popup menu.
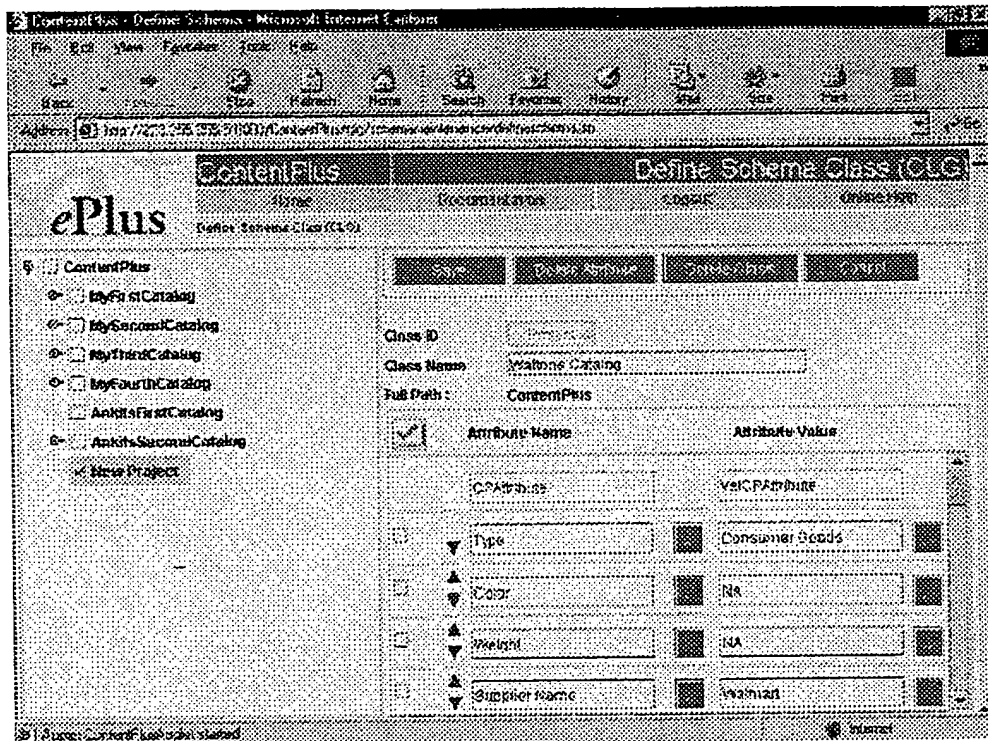
3. In the **Class Name** field in the right pane, enter the name of the project.

4. In the **Attribute Name** field, enter the attribute name. Alternatively, click on the **Select Attribute** (...) button, the Select Attribute dialog box will appear. Select from the list of available attributes.

5. In the **Attribute Value** field, enter the attribute value.

   Note: The Select Attribute Value (...) dialog box can be opened only for the saved class attributes.

6. Click on the **Save** button. The message *"New Project has been successfully created"* will appear. Click on **OK** button to clear the message.

3.2 Add New Class

1. Select a project or a class from the left pane, and right click on the selected node.

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Click to add a new Class

Click to find the class in
the selected project

2. Select **Add New Class** option from the right-click menu.

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3. In **Class Name** field, enter the class name.

4. In the **Attribute Name** field, enter the attribute name.

5. In the **Attribute Value** field, enter the attribute value.

6. Click on the **Save** button. The message "*New Class <classname> has been successfully created*" will appear. Click on **OK** button to clear the message.

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7. Click on up or the down arrow icon to swap positions of the selected **Attribute Name** and **Attribute Value**.

8. Click on the **Select Attribute** button, the Select Attribute dialog box will appear.

Click on this to close the dialog box
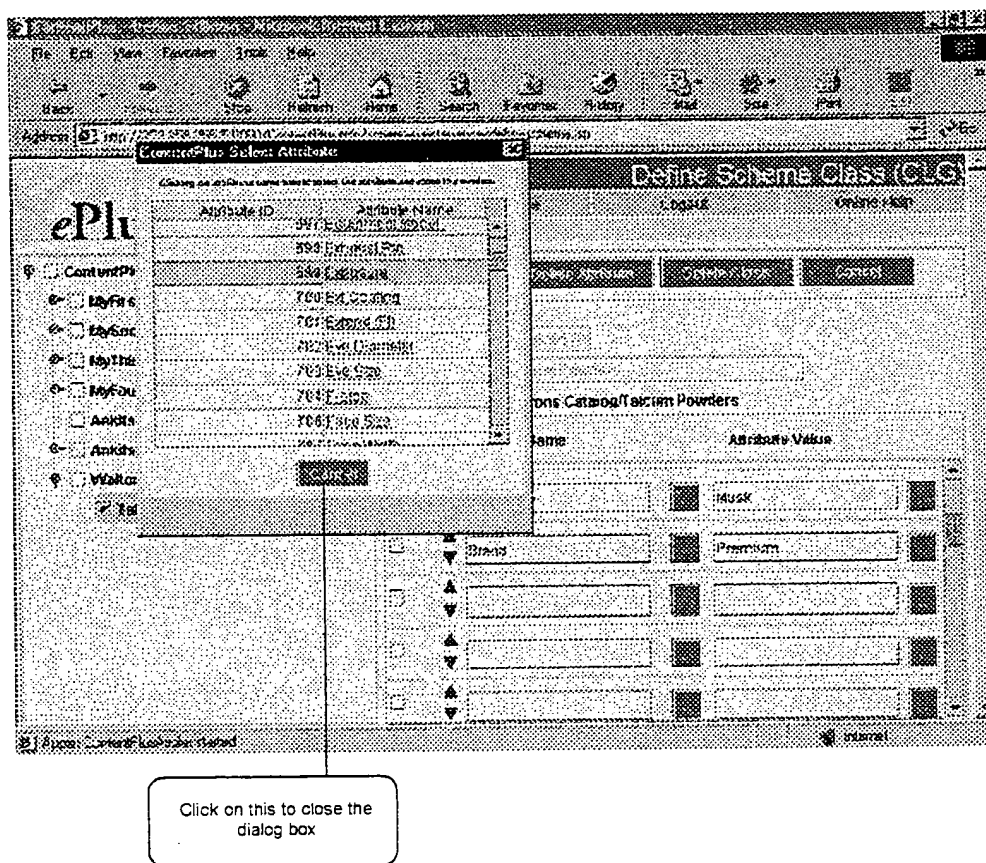
9. Click on the **Attribute Name** link to select an attribute and close the dialog box.

10. Click on the **Save** button. The message "*Details of selected class have been successfully updated*" will appear. Click on **OK** button to clear the message.

11. In case, a copy of an existing class is to be created, then right-click on the appropriate class and select **Copy** from the right-click menu. Right-click on the target class, and select **Paste** from the right-click menu. A message "*Do you want to copy the items under the selected class and all its subclasses*" will appear. Click on **Yes** button to copy. The selected class will be copied under the target class.

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Click to copy the selected class

Click to rename the selected class

Click to cut the selected class
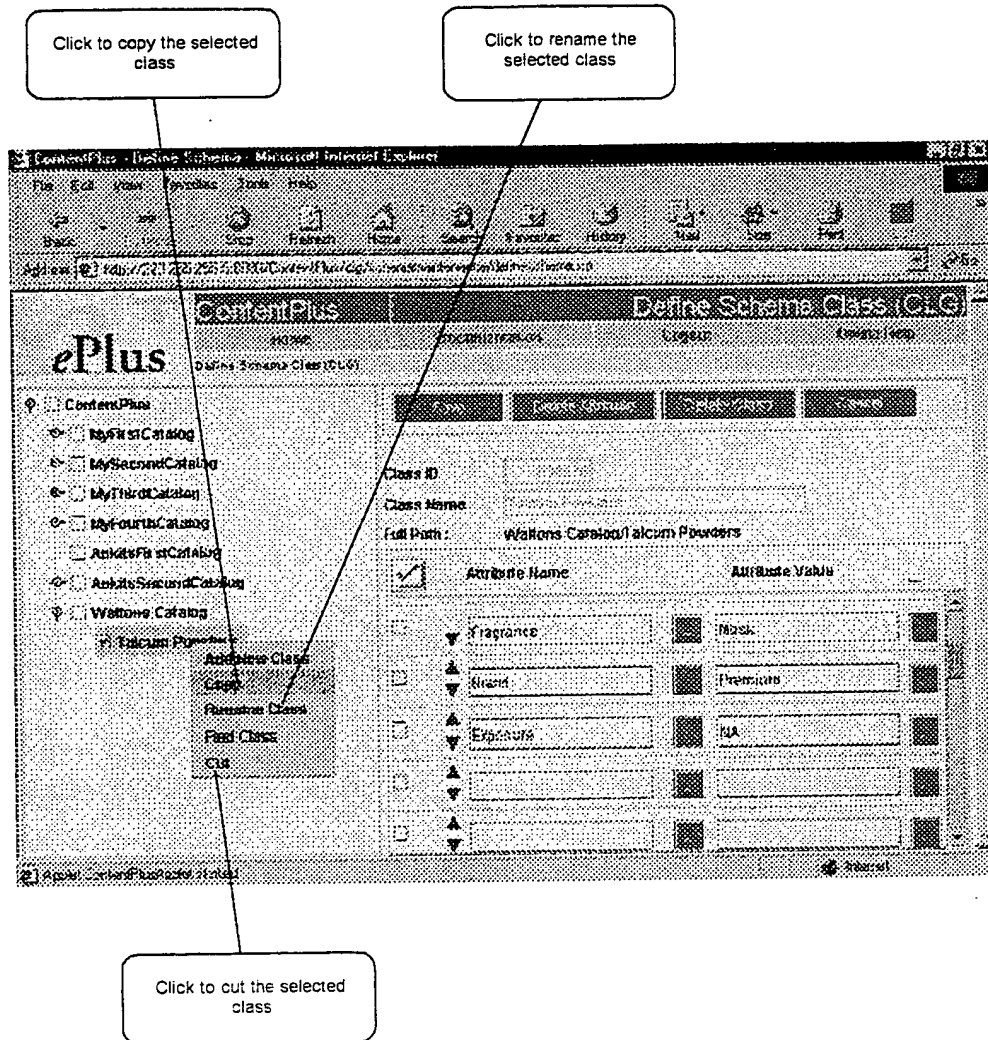
Click to Paste the
Copy/Cut Class
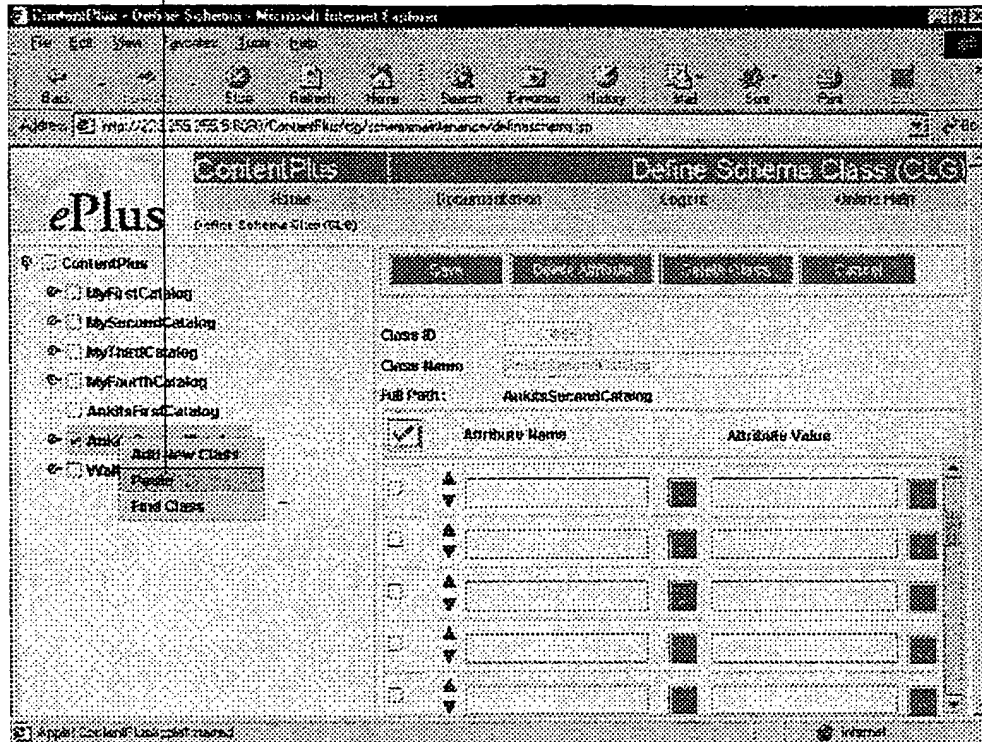
12. In case, a class is to be renamed right-click on the respective class and select **Rename Class** option from the right-click menu.

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13. In the **Class Name** field, modify the class name.

14. Click on the **Save** button. The message "*Selected class has been successfully renamed*" will appear. Click on **OK** button to clear the message.

15. In case, a particular class is to be searched, then right-click on the tree and select **Find Class** option from the right-click menu. The Find Class dialog box will appear.

Find the desired class based on the specified search criteria

Click on this to close the dialog box
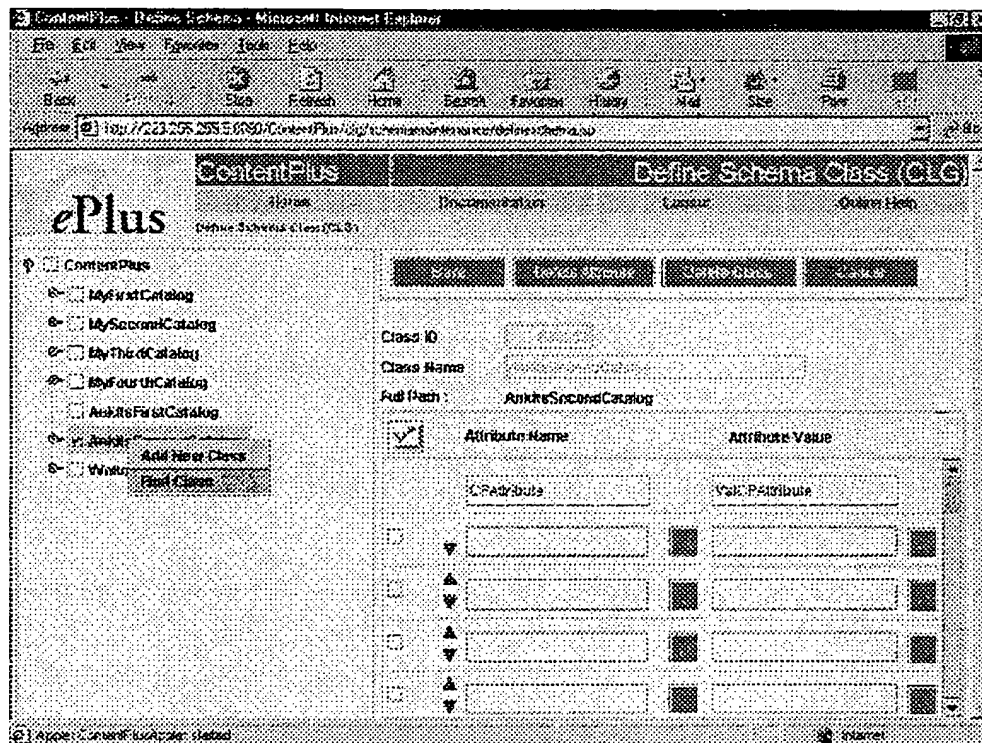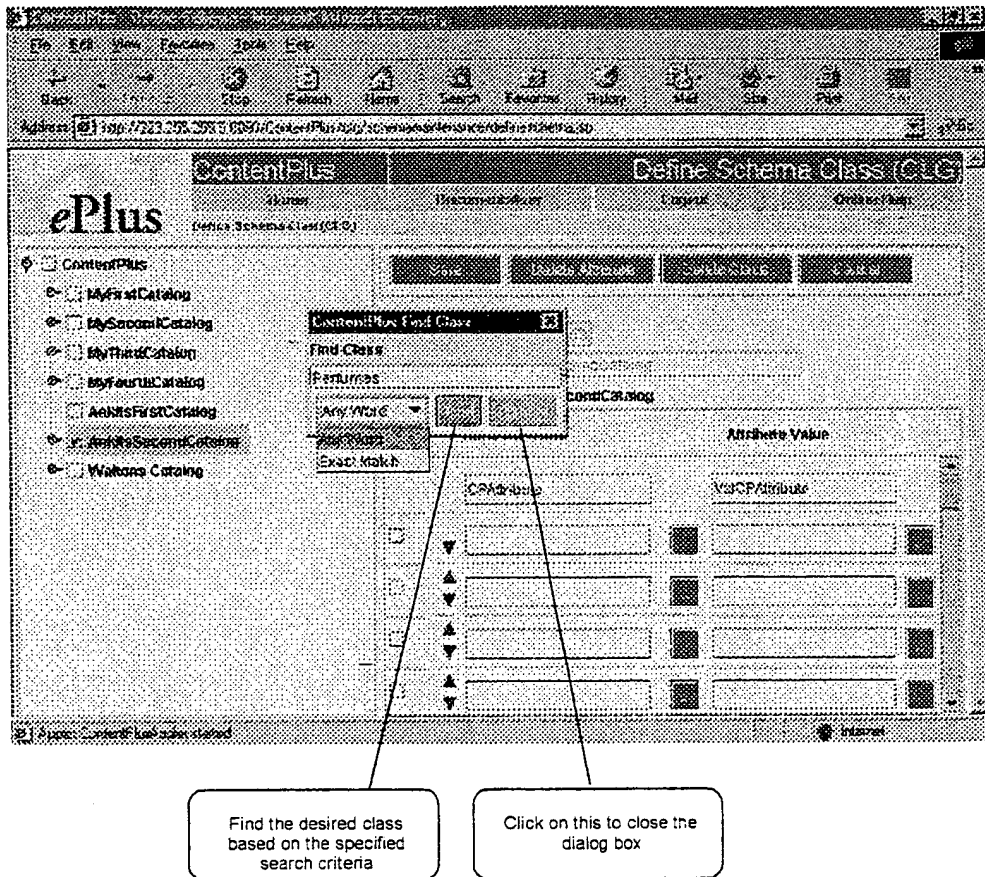
16. In the **Find Class** field, enter the class name for search. From the drop-down list select either **Any Word** or **Exact Match** option depending on the method for searching.

17. Click on **Find** button, the Class Name Search Results dialog box will appear. The dialog box will show the full class path under which the searched class was found.

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Click on this to navigate to the selected class in the search result list

Click on this to search for another class

Click on this to close the dialog box

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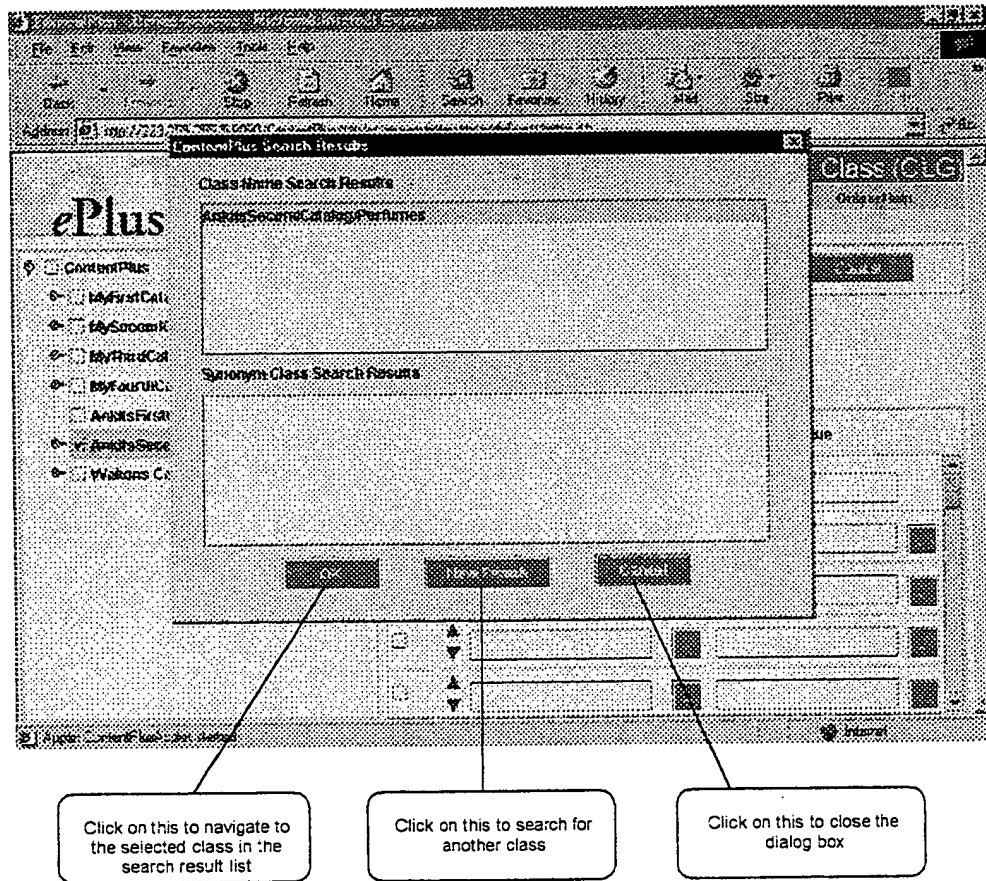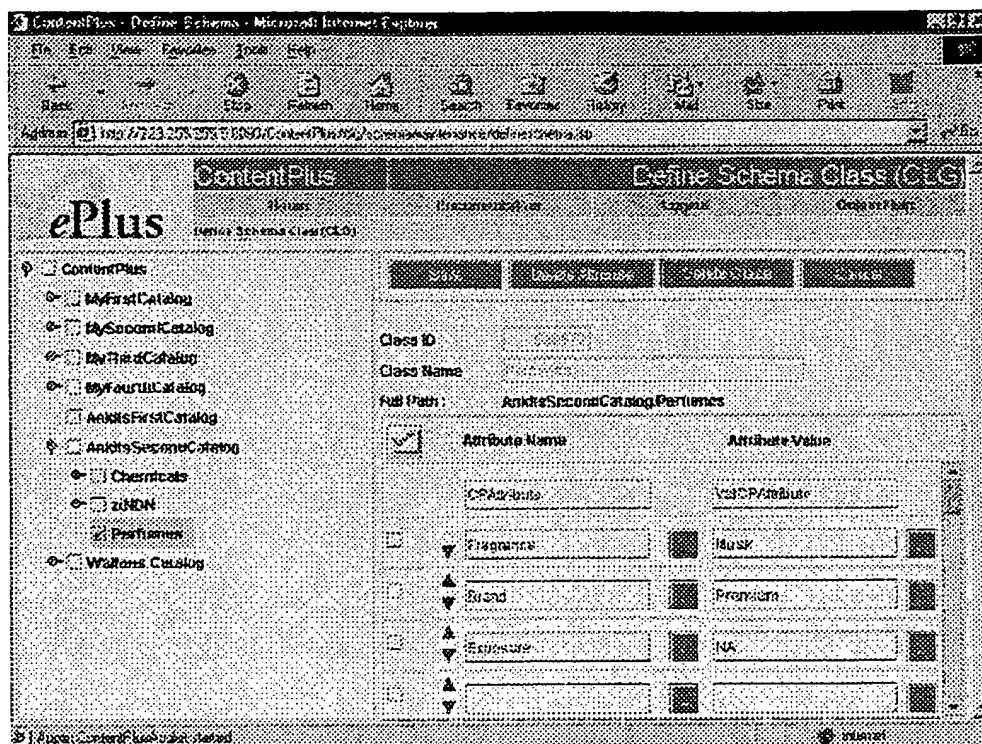
18. Select the required class path, and click on the **OK** button, to expand the tree select the respective class. Click on the **New Search** button in case you want repeat the search, or click on the **Cancel** button to clear the dialog box and return to Define Schema Class (CLG) screen.

19. In case, you want to move an existing class right-click on the respective class and select **Cut** option from the right-click menu.

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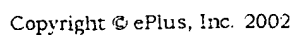
20. Right-click on the target class, and select **Paste** option from the right-click menu. The message "Item under the selected class and all it's subclasses will be copied" will appear. Click on **OK** button to clear the message. The selected class will be moved under the target class.

3.3   Delete Class

1. Select the class to be deleted, and click on the **Delete Class** button. The message "Please ensures that no other users are working on the selected class, its items or any of its subclasses and their items. The operation will result in deletion of classes and items. Are you sure you want to continue." will appear.

Delete the class

Do not delete and close the dialog box
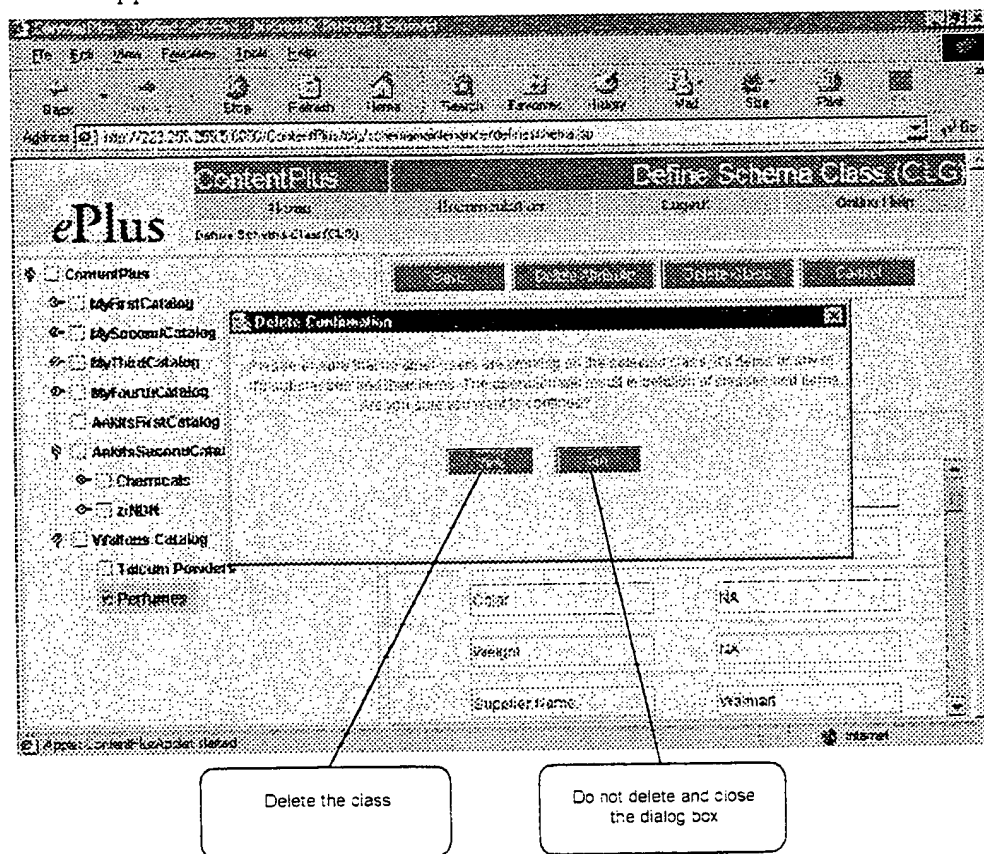
2. Click on **Yes** button to delete the class. The message "The selected class has been successfully deleted" will appear. Click on **OK** button to clear the message. Click on **No** to cancel the delete operation.

1. In case, the class's attributes need to be deleted, select the check box for the respective attribute and click on the **Delete Attribute** button. The message "*The selected class attributes have been deleted*" will appear. Click on **OK**

button to clear the message. The selected attributes will be deleted from the respective class.

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4 Schema Maintenance

Through the schema maintenance function users can create classes that represent the classification schema for items.

4.1 Add New Class

1. Select User & Administration → Catalog Maintenance → Schema Maintenance → Define Schema in the tree menu on the home page. The Define Schema screen will be displayed as follows:

2. Select a project or a class from the left pane, and right click on the selected node
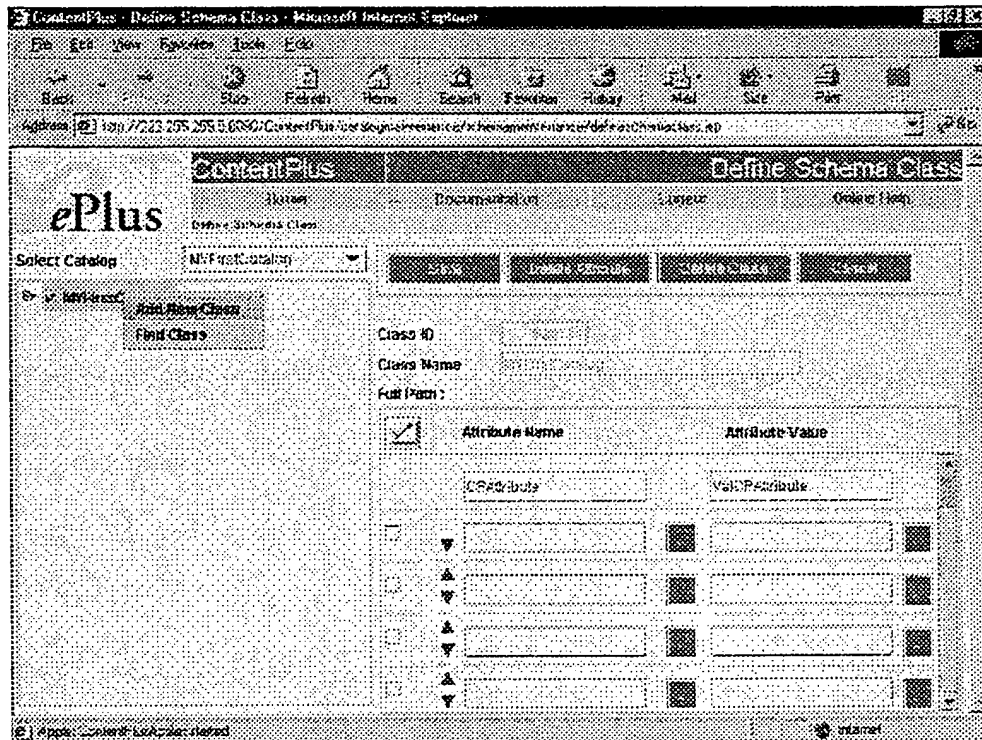
3. Select **Add New Class** option from the right-click menu.

4. In **Class Name** field, enter the class name.

5. Click on the **Select Attribute** button, the Select Attribute dialog box will appear.

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6. Click on the **Attribute Name** link to select an attribute and close the dialog box.

7. Click on the **Save** button. The message *"New Class <classname> has been successfully created"* will appear. Click on **OK** button to clear the message.

8. In case, a copy of an existing class is to be created, then right-click on the appropriate class and select **Copy** from the right-click menu. Right-click on the target class, and select **Paste** from the right-click menu. A message *"Do you want to copy the items under the selected class and all its subclasses"* will appear. Click on **Yes** button to copy. The selected class will be copied under the target class.

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9. In case, a particular class is to be searched, then right-click on the tree and select **Find Class** option from the right-click menu. The Find Class dialog box will appear.

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10. In the **Find Class** field, enter the class name for search. From the drop-down list select either **Any Word** or **Exact Match** option depending on the method for searching.

11. Click on **Find** button, the Class Name Search Results dialog box will appear. The dialog box will show the full class path under which the searched class was found.

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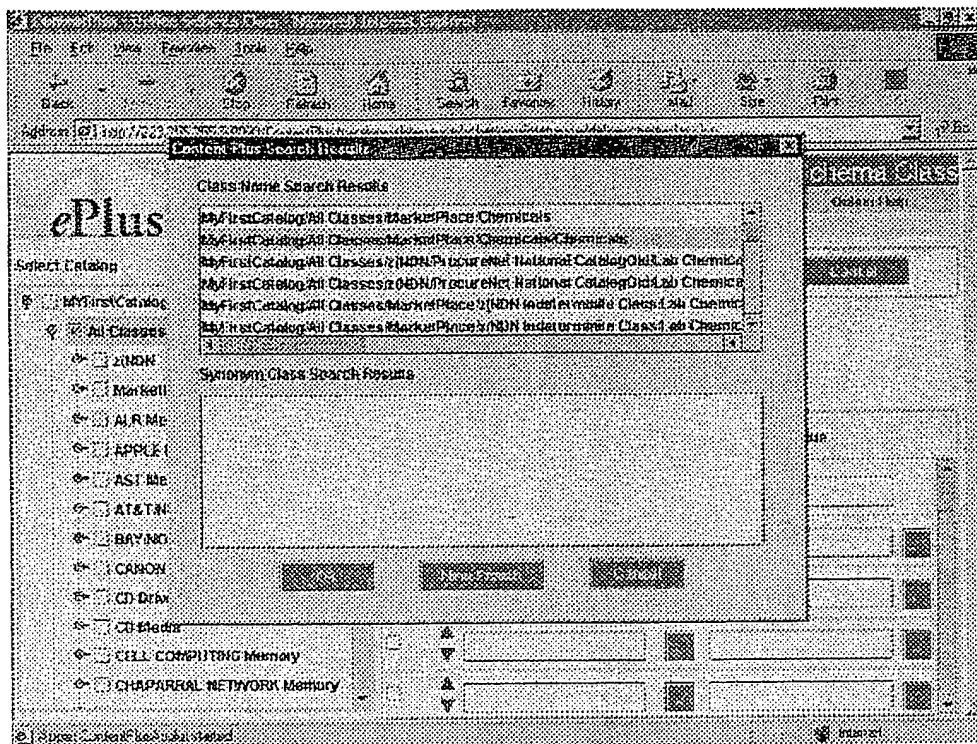
12. Select the required class path, and click on the **OK** button, to expand the tree and select the respective class. Click on the **New Search** button in case you want repeat the search, or click on the **Cancel** button to clear the dialog box and return to Define Schema Class screen.

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13. In case, you want to move an existing class right-click on the respective class and select **Cut** option from the right-click menu.

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14. Right-click on the target class, and select **Paste** option from the right-click menu. The message "Item under the selected class and all it's subclasses will be copied" will appear. Click on **OK** button to clear the message. The selected class will be moved under the target class.
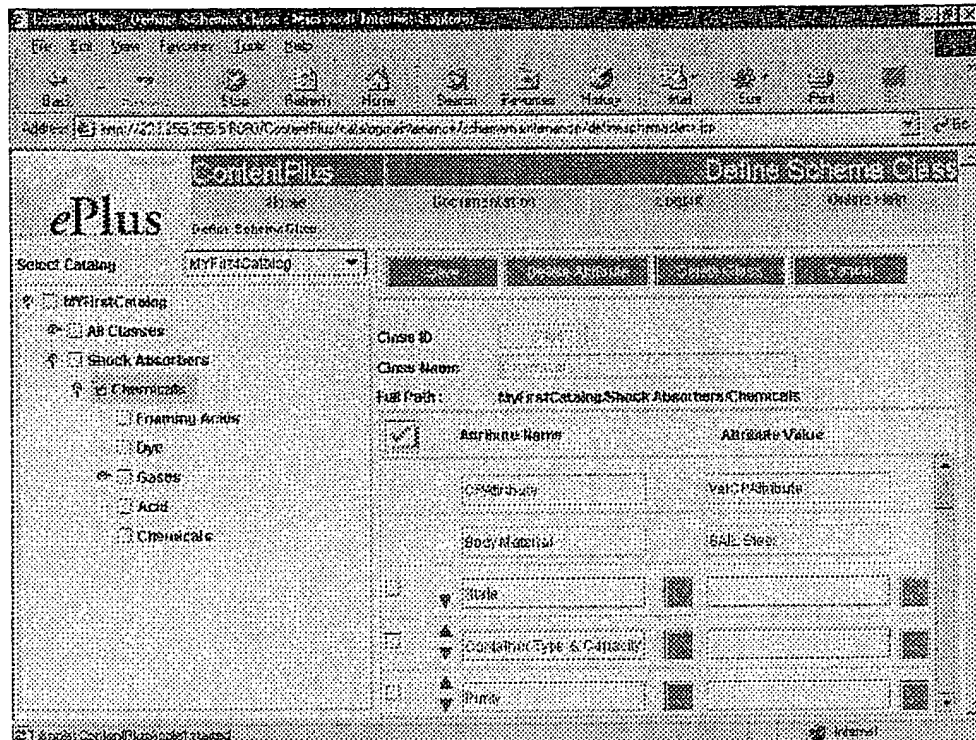
4.2   Delete Class

1. Select the class to be deleted, and click on the **Delete Class** button. The message "*Please ensure that no other users are working on the selected class, it's items or any of its subclasses and their items. The operation will result in deletion of classes and items. Are you sure you want to continue.*" will appear.

2. Click on **Yes** button to delete the class. The message "The selected class has been successfully deleted" will appear. Click on **OK** button to clear the message. Click on **No** to cancel the delete operation.

3. In case, the class attributes need to be deleted, select the check box for the respective attribute and click on the **Delete Attribute** button. The message *"The selected class attributes have been deleted"* will appear. Click on **OK** button to clear the message. The selected attributes will be deleted from the respective class.

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APPENDIX VII – TEMPLATE FOR PROPOSAL FOR A CONTENT SOLUTION

Proposal for a
Content Solution to
<Customer Name>

Table of Contents

Volume I: Executive Summary

Delivering ePurchasing Value

ePlus Systems realizes that modern technology implementations encompass much more than just Technology – they encompass people. Technology fails when it is arduous to implement and difficult to use. Supporting this philosophy, we will work with <Customer Name> to identify viable options to ensure a smooth transition of content from limited description legacy data to feature-rich content. We are committed to cultivating a deep understanding of your business needs both today and moving forward, and we take pride in tirelessly working to deliver the most robust content solution available today.

Content That Meets Your eCommerce Expectations

Without accurate content, eCommerce is like looking for a needle in a haystack. The mission of our content team is to collect, enhance, maintain, and publish rich content for our clients in a structured format. Our solutions let you find what you need -- every time -- with optimal results. Companies that have embraced eCommerce strategies have found that one of the most critical components to their success is the quality of the content on the site. If users cannot find the items they need quickly and efficiently, they will stop using the site.

> **"Quality of content directly impacts whether the buyer enterprise will realize return on investment in its eProcurement program. If content is of poor quality, end-users will tend to not use the eProcurement system and resort to maverick (i.e., off-contract) spending. Thus, all price discounts and other cost of ownership benefits are lost."**
>
> *Granada Research Technology Report*

ePlus Systems Common Language Generator translates legacy product descriptions into rich, eCommerce content. By leveraging this technology, ePlus Systems can use pattern recognition to identify attributes and produce standardized values that eliminate duplicate and inconsistent information. This structured data improves productivity by letting end-users quickly and easily find the items they're looking for.

ePlus Systems knowledge base includes over 200,000 patterns covering more than 44,000 families of goods and services. Because the content factory generates data in a highly structured format, it can be used to load any database (Oracle, Sybase, DB2, Access, etc.) or any spreadsheet (such as Excel), as well as outputting XML.

The data cleansing process combines project management, data analysis, and data rationalization technology to help ePlus Systems clients maximize the integrity of their data for use in eCommerce systems.

ePlus Systems also offers the world's most effective resource for capturing and publishing data and images for both eCommerce catalogs and custom printed catalogs. This includes access to a comprehensive database of manufacturer parts, images and usage tables. Our Content solution will provide the feature-rich content <Customer Name> needs to make its eCommerce initiatives successful.

The Critical Need for Rich Content

The "best" data for Internet eCommerce includes both *rich* descriptive, intuitive content and manufacturers' technical descriptive information. However, you can have all of the rich content in the world and you may still fail if the shopper cannot find his item. ePlus has developed a unique

solution to ensure incredibly high hit ratios while minimizing the "clicks" required in finding data. Our solution will provide your company with the following advantages:

- Data can be used throughout the production, accounting, customer service and marketing functions of the enterprise.
- Supports industry norms for categorizing, searching, purchase orders descriptions, and design descriptions. (Data and images together provide intuitive transaction support so users will see a familiar description and image.)
- Linked to supporting information (such as images, usage tables, MSDS sheets, etc.).
- Linked supporting information supports electronic and printed publishing.
- Content is formatted and updated to meet industry and Market Place standards (ROSETTANET, cXML, XML, etc.).
- Content can be published and managed in-house or via service bureaus, depending on owner's skills and resources.
- Content is easily accessible by owner.
- Advanced text-based and/or parametrically searchable.
- Data cross-referencing using UNSPSC, UPC and other standards.
- Data can be used for both print and electronic publication.

Product Content is the core of any eBusiness. How you manage that content is a key factor driving the success—or failure.

*e*Plus's Common Language Generator (Technology and Services) takes the data and images that are generated and normalizes the product descriptions and information into rich, eCommerce content while allowing you to maintain your *Brand Recognition*. By leveraging technology and services, *e*Plus's content solutions can quickly bring your products to any market.

Content Conversion

Using *e*Plus Content Systems unique **Common Language Generator** technology, content is transformed from legacy data to rich eCommerce data. Following are examples of the difference between these two types of data:

Legacy data is often confusing and un-useful as illustrated below:

Product Number	Product Description	Vendor Catalog Number	Vendor Business Name	Commodity Code Primary Description	Commodity Code Secondary Description	Commodity Code Tertiary Description
1050565	MUFFLE FURN 12.75X6.75X10 208V	F60380M	BARNSTEAD THERMOLYNE CORPORATION	EQUIPMENT	CONSTANT TEMPERATURE	FURNACES

This cleansed catalog item can now be viewed with rich content descriptions and is fully searchable for easy ordering and procurement.

MarketPlace Catalog

Product Information

Quantity | Add to Cart
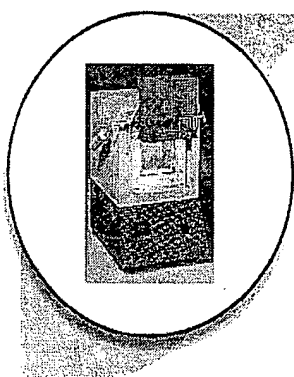
Product Description

↳ Thermolyne Heavy-Duty Benchtop Muffle Furnaces, Model, 4-Step Programmable

FEATURES

Thermolyne Heavy-Duty Benchtop Muffle Furnaces, Compact heavy-duty benchtop furnaces have embedded heating elements on four sides that provide fast heatup with minimum gradient. Ceramic fiber insulation surrounds chamber, reducing heat loss. Counterweighted door opens up and out, keeping hot side away from user. Door is surrounded by durable firebrick insulation and contains a safety switch that deactivates heating elements when door is opened.

Two controller types are available: one that provides automatic single-setpoint control, and a programmable model that features four settings—two ramps to vary heat-up rate and two dwell cycles to hold temperature at set levels from 0.1 to 999.9 minutes. "Holdback" feature "holds" program until furnace temperature heats up or cools down to preprogrammed parameters—program will never outrun furnace performance.

All models feature LED display that simultaneously shows both setpoint and actual furnace temperatures in either °C or °F; overtemperature protection at a user-selectable temperature; open thermocouple protection; and adjustable power output from 1 to 100%. Operating range is 100° to 1200°C (212° to 2192°F). All models are supplied with a Platinel II thermocouple and a ceramic hearth plate to protect the bottom heating element. Note: Three-wire cord and plug not supplied. Contact your Fisher Customer Service Center for ordering information.

Ordering Information: Capacity: 0.08 cu. ft. (0.002m^3). Chamber: 9D x 4W x 3 3/4 in.H (23 x 10 x 9.5cm). Overall (door open): 18L x 11W x 25 in.H (46 x 28 x 63.5cm). Shipping weight, 52 lb. (24kg). 2240w.

Model:	4-Step Programmable
Voltage:	120V 50/60Hz
Manufacturer Name :	Barnstead Thermolyne Corp.
Manufacturer Part Number :	FD1545M
Price:	$1,802.97
Product ID:	831192

Why choose *e*Plus Systems?

*e*Plus Systems is an undisputed eProcurement leader with a 10-year history of providing content, technology, and value added services to our customers. It's no surprise that we have been described by Granada Research as one of the "grand-daddies" of the data normalization businesses. *e*Plus Content Systems is one of the few service providers that has deep experience and tools in data conversion, and can efficiently create aggregated supplier catalogs using the buying enterprises'

existing legacy systems and data, suppliers systems, as well as augmenting this data with its own product databases.

*e*Plus Content Systems has processed millions and millions of items, offers full text-based and parametric searching abilities, and has the most complete, patented software technology working in over 100 production sites every day. Our advanced content capabilities can save <Customer Name> millions of dollars per year by preparing your catalog content for eCommerce, reducing inventory, improving business processes, and streamlining your material management processes.

*e*Plus Content Systems has millions of discrete items in our knowledge base including over 200,000 patterns covering more than 44,000 families of goods and services.

MarketPlace Catalog

Graph It !

▶ ePlus MarketPlace ▶ Lab & Medical Products ▶ Fisher Safety Products ▶ Spectacles ▶ 7000 UFO Mercury Spectacles Black Frame   **Unique Features**
(4 Products)

		Item Number	Qty	UOM	Description	Price	Unit	Lens Tint	Manufacturer Part Number
1		980699		Add	Glasses Black Frame	$8.05	EA / 1	Clear	70MB-000	1
2		1000997		Add	Eye Protection Spectacles Black Frame	$96.11	PK / 12	Gray	70MB-002	2
3		1000999		Add	Eye Protection Spectacles Black Frame	$107.11	PK / 12	Mirror	70MB-049	3
4		1006570		Add	7000 UFO Mercury Spectacles Black Frame	$96.11	PK / 12	Amber	70MB-003	4

Common Features

Common Features	
Frame Color	Black Frame
Manufacturer Name	HL Bouton Co., Inc.

🌐 Don't see what you need?

Request Quote For 🌐
Non-Catalog Item

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Users can also perform searches by item attributes as shown by the following example using *e*Plus Systems catalog.

OrderPlace Catalog

Category Search Results for Protective Spectacles

List Matching Products (4)   **Compare Products** (4)
Please Refine Your Search Below

Select Values

Shape	No Preference
Weight	No Preference
Lens Color	No Preference
Lens Material	Polycarbonate
Specification	ANSI Z87.1-1989
Frame Color	No Preference
Frame Style	Wrap-Around
Temple Style	Adjustable
UV Absorption	No Preference
Brand Name	No Preference
Manufacturer Name	HL Bouton Co., Inc.
Manufacturer Model	No Preference
Manufacturer Part Number	No Preference
Supplier Name	No Preference
Supplier Part Number	No Preference

Refine Search to Match Selected Values

Our process empowers the user to quickly and efficiently find the product they are looking for. Our classification hierarchy, parametric or text-based search capabilities minimizes the "frustrated shopper" syndrome, resulting in a higher reuse of your eCatalogs by your clients.

Summary

Our data services will transform <Customer Name> eCatalog into rich content suitable for any eCommerce engagement.

*e*Plus Content Systems is proud to say " We Deliver" a complete end-to-end, Web-based eContent solution that maximizes online purchases while simultaneously streamlining costs and increasing profits. By taking the time to truly decipher where <Customer Name> 's eCommerce initiatives are now, and where the company aspires to be, we can leverage our advanced technology to deliver a

solution that will not only simplify your data scrubbing function, but also create maximized value and a significant and identifiable return on investment.

We hope you agree that *ePlus* Content Systems, Services and Solutions is well positioned to help <Customer Name> exceed its evolving eCommerce objectives. Our knowledge and leadership in eCommerce in general and data conversion specifically ensure the success of your project. Our methodology provides you the basis for data to be delivered to you on time, within budget and with the quality that you need in order to be successful in eCommerce.

Volume II: Technical Response

Our *Unique* Content Value Proposition

The Content+ Solution

The Content + Solution is a robust toolset and a process for building custom eCommerce catalogs, developed and used within the ePlus Content Transformation Center (CTC). ePlus offers this customized toolset combining the proven technology and processes used today in our Houston facilities. This toolset is designed to allow the aggregation of electronic data and images, into a structured catalog format. This will allow the user to define the catalog structure and attributes associated with the different commodities, and maintain the catalog from the highest level of commodities classification to the individual product level. The Content + Platform will provide the features and functionality as described below:

Components / Modules
- Scottsdale – The Content Platform
- DB - mapping module for compliant suppliers and for non-compliant suppliers who just point the data to us and we pick it up, a separate module.
- Data Mapper: For XML output to Format
- Auto Load Utility: Allows Importation of Structured, Classified databases
- CLG - Common Language Generator
- CMU - Allows editing of products and Images, Adds, Deletes
- CLU - Load utility to import supplier files
- Content Portal - Syndication tool

Functions
- Delta Analysis, tracks changes to products
- Content Editing Tools, Spell Checker, Proper Case Module: Sets Character Case
- Security Module – Based on Logins system to determine what kind of interface to present to user
- Reports for Management, production by user
- Status Tracker, cycle stage
- Error Log / Event Viewer
- Job Scheduler: for modules that can be scheduled to run as jobs
- Job Notify: On success or Failure of jobs scheduled

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Scottsdale - The Content Platform

- Open scalable platform allows integration to existing legacy systems and applications (SAP, Empact, etc)
- Sequel Database Design
- 113 fields of product information. 60 fields can be user defined
- Search engine.
- Shopping Cart
- Users can administer views and pricing by group and product views
- Multi tier pricing
- Pricing by quantity
- Promotional pricing
- Images, Streaming Media, drawings, MSDS, PDF, JPEG, GIF
- Full Marketing descriptions and Short (254 char) technical description
- Supports cross-selling
- Supports XML

MarketPlace Catalog

Graph It!

(7 Pro

			Description	Price	Unit	Style	Size	Manufacturer Name	Manufacturer Part Number	
1			t Tables, Stackers, Manually Operated Lifts, 66 Inch X 26 Inch W X 38 Inch L 5 1/4 Inch Lowered Height)0 lb Cap	$807.30	EA / 1	Manually Operated	66 Inch H X 26 Inch W X 38 Inch L	Presto	M152	1
2			t Tables, Stackers, Manually Operated Lifts, 82 Inch X 26 Inch W X 38 Inch L 5 1/4 Inch Lowered Height)0 lb Cap	$884.93	EA / 1	Manually Operated	80 Inch H X 26 Inch W X 38 Inch L	Presto	M166	2
3			t Tables, Stackers, Manually Operated Lifts, 92 Inch X 26 Inch W X 38 Inch L 5 1/4 Inch Lowered Height)0 lb Cap	$970.31	EA / 1	Manually Operated	92 Inch H X 26 Inch W X 38 Inch L	Presto	M178	3
4			t Tables, Stackers, Manually Operated Lifts, 66 Inch X 32 Inch W X 49 Inch L 3 1/4 Inch Lowered Height)0 lb Cap	$931.50	EA / 1	Manually Operated	66 Inch H X 32 Inch W X 49 Inch L	Presto	M452	4
5	247799	Add	Lift Tables, Stackers, Manually Operated Lifts, 82 Inch H X 32 Inch W X 49 Inch L 3 1/4 Inch Lowered Height 1000 lb Cap	$1,009.13	EA / 1	Manually Operated	80 Inch H X 32 Inch W X 49 Inch L	Presto	M466	5
6	247800	Add	Lift Tables, Stackers, Manually Operated Lifts, 92 Inch H X 32 Inch W X 49 Inch L 3 1/4 Inch Lowered Height 1000 lb Cap	$1,086.75	EA / 1	Manually Operated	92 Inch H X 32 Inch W X 49 Inch L	Presto	M478	6
7	281072	Add	Lift Tables, Stackers, Hydraulic Pump Pedalift, 54 Inch Lift Height 22 Inch X 22 Inch Platform 750 lb Capacity 162 lbs	$833.21	EA / 1	Pedalift		Wesco	DPL-54-2222	7

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The *e*Plus Systems Advantage (CLG)

*e*Plus Systems unique content management conversion technology, The **Common Language Generator (CLG)**, translates legacy product descriptions into easily understood formats for our *e*Plus Systems customers. By leveraging this technology, *e*Plus Systems can use pattern recognition technologies to identify attributes and produce standardized values incorporating your business rules and eliminating duplicate and inconsistent information. This structured data improves productivity by letting end-users quickly and easily find the items they're looking for and reduce the "frustrated shopper syndrome".

Because the CLG generates data in a highly structured format, it can be used to load any database (Oracle, Sybase, DB2, Access, etc.) or any spreadsheet (such as Excel), as well as XML. The data cleansing process combines project management, data analysis, and data rationalization technology to help *e*Plus Systems clients maximize the integrity of their data for use in eCommerce systems. <Customer Name> investment is also protected by the use of our technology since the patterns that are added to the *Common Language Generator* are reusable and may make future updates and additions more efficient.

As pioneers and leaders in the field of electronic content, *e***Plus** Content Systems offers industry-leading technology and a client-focused approach to our relationships. Our long history and proven record of delivering advanced eCatalog solutions illustrate the value we can bring to <Customer Name>.

Our functionally-rich technology and project management and implementation services enable us to deliver a customized solution that can help <Customer Name> streamline data cleansing from all manufacturers with one comprehensive solution, while significantly reducing costs.

*e*Plus Content Systems 's Content Transformation Center (CTC) has the expertise and technology to cost-effectively help migrate <Customer Name> from legacy data to an advanced easy-to-use eCatalog. By working closely with <Customer Name>, we can identify the most cost-effective ways to meet all your data needs. We can deliver value both by enhancing existing technologies with industry-leading capabilities such as our Common Language Generator.

The advantages of *e*Plus Systems Content Services solution are significant and clear, based on the following:

Will quickly and efficiently transform your legacy data into eCommerce-ready data;
Ensure that customers can find each item;
Enable <Customer Name> to participate in any eCommerce engagement with the quality of data required to ensure customer ordering.
eCommerce requires rich eCatalog content management to succeed. *e*Plus Systems has the proven technology and the rich eCatalog content required to succeed in eCommerce.

The *e*Plus Content Systems Common Language Generator (CLG)

Historically, data has been cleaned or 'rationalized' manually—often an expensive and labor-intensive venture. It requires highly trained materials experts that examine product data line by line. This technique is exceedingly time consuming, expensive, and produces inconsistent results due to human error.

*e*Plus Systems unique Common Language Generator (CLG) technology reduces the time and high cost of traditional data cleaning. CLG captures the knowledge of material experts in a Knowledge Base so that data rationalization becomes a repeatable process supported by the Knowledge Base instead of an individual. CLG generates consistent, structured, and accurate data in a more efficient and cost effective manner than a manual process.

Using the Knowledge Base, CLG translates existing material descriptions, with all their inconsistencies, into one standard description format. Through this automation, CLG improves the productivity and accuracy of standardizing free-form text items. It uses pattern recognition to identify attributes and produce standardized format values. CLG is context sensitive for each class of items, and can dynamically adjust its pattern recognition to each material description's content.

The following are two descriptions for a gate valve from a supplier's system:

- **BRZ 125# SWT NRS GATE VLV ABC VALVES 5552- 2-IN EA C5552H PR BRZ**

- **BRZ 125LB THRD NRS GT VALVE ABC VALVES 6312- 1/4 IN EA C6312 PR BRZ.**

Without a key or some sort of material knowledge it is extremely difficult for a first time user to understand the meaning of this data. This is not the type of data that a supplier would choose to put in front of a customer.

In addition, inconsistencies can be found between the descriptions of the first and second items. In the first item, the ANSI pound rating is referred to as "125#" but in the second item, the rating is "125lb". A user searching for the string "125lb" would not get a hit on "125#" even though both items would fit their requirements.

For this item, the rules are built in a category set for "VALVE: GATE". When CLG first analyzes the data it looks for a category match. In this case it would find "Gate Vlv" and "Gt Valve" and compare this to the Knowledge Base. If those text strings had been previously built for the gate valve category then CLG would analyze the attributes under GATE VALVE and compare them to the description for matches.

In cases where CLG finds a match against more than one category, it utilizes material intelligence to determine the best match. For instance, CLG may examine a line and recognize the word "Washer". It finds three categories that use "washer" as a heading; a fastener component, a clothing washer, and a liquid cleanser. By analyzing the rest of the data surrounding the word, CLG recognizes three attributes that match the category for clothing washer, but only one attribute for the others. It therefore determines that the item is a clothing washer. To date, the CLG Knowledge Base correctly identifies items over 90% of the time.

Once CLG determines a product's category, the rules for that category are invoked to identify the attributes that identify the item. Below are several examples of the rules that have been created for the "VALVE: GATE" category that would fire against the line items shown earlier in this section:

> "BRZ" = "BRONZE"
> Any number preceding "#" or "LB" = ANSI Pound Rating
> Any number preceding "IN" = Pipe Size

The final output would look similar to this:

	LINE 1	LINE 2
CATEGORY:	VALVE	VALVE
QUALIFIER:	GATE	GATE
PIPE SIZE:	2 INCH	1/4 INCH
ANSI LB RATING:	125 POUND	125 POUND
END CONNECTIONS:	SWEAT	THREADED
CLOSURE	NON-RISING STEM	NON-RISING STEM
BODY MATERIAL:	BRONZE	BRONZE
UNIT OF MEASURE	EACH	EACH
MANUFACTURER NAME:	ABC VALVES	ABC VALVES
MANUFACTURER PART NUMBER:	5552	6312

The result is much easier for an end-user to read and is consistent from one item to the next. Once these patterns are built, they then fire against any record that is defined as a Gate Valve. The process becomes very automated and saves data personnel the hassle of re-keying the item by hand. Not only are the results easier to read for the end user but also they enable the customer to search parametrically or by advanced text. By clicking on a category of Valve, for example, the user would be presented with a series of drop down boxes that contain *only the valid choices* for the attribute. This keeps the customer from making keystroke errors and quickly narrows the search to the product that best fits the customer's need.

The CLG Knowledge Base

To date, the CLG Knowledge Base contains over 200,000 patterns across 44,000 families of goods and services. This represents over 1.5 million distinct items. Users can easily add new vocabulary and grammar to the Knowledge Base for new valid values, synonyms, misspellings and abbreviations in their own data. Once the material experts' knowledge has been captured in patterns (rules), CLG can process up to 100,000 material descriptions per hour.

Most importantly, *e*Plus Systems CLG technology transforms legacy data to user-friendly information, as shown in the following examples:

Legacy Input

Supplier Part Number	Manufacturer	Manufacturer Part Number	Category1	Noun	Modifier	Char 1	Val 1
78909195325	AMP	406372-2	Data communications	CONNECTOR	COMMUNICATIONS	TYPE	JACK, MODULAR

Char 2	Val 2	Char 3	Val 3	Char 4	Val 4	Char 5	Val 5

CONDUCTOR	26-20 AWG SOL/STR	POSITION	8	COLOR	BLACK	ADDITIONAL DETAIL	ENHANCED CATEGORY 5,RJ45,UNIVERSAL 110 F/ T568A & T568B WIRING SCHEMES

*e*Plus Output

Product Information
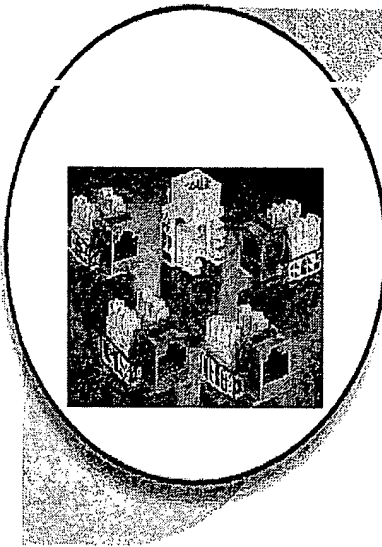
Product Description

↳ 110 Modular Jack Assembly, RJ45, Universal, Category 5, Modular Plugs and Jacks, Cable Mounted Jacks, Brand: AMP, F/ T568A & T568b Wiring Schemes, Package Quantity: 1

FEATURES

110 Modular Jack Assembly, RJ45, Universal, Category 5, Modular Plugs and Jacks, Cable Mounted Jacks, Brand: AMP, Product Type: Jack, Jack Type: 110Connect, No. of Positions: 8, Wiring Pattern: Universal, Termination Style: 110 style punch-down, NETCONNECT Select System: Yes, Keyed: No, Shielded: No, Performance Category: Enhanced Cat 5, Housing Color: Black, Packaging Method: Poly Bag, Packaging Quantity: 1, Housing Material: Polyphenylene Oxide, Housing Flammability Rating: UL 94V-0, Contact Material: Phosphor Bronze, Contact Mating Area Plating: Gold (50) over Nickel, Contact Termination Area Plating: Tin-lead over Nickel, Wire Range (Solid) (mm [AWG]): 22 - 26 AWG, Wire Range (Stranded) (mm [AWG]): 20 - 26 AWG, 110 Block Material: Polycarbonate, Comment: T568A and T568B wiring patterns combined in one P/N.

Type:	Category 5
Conductors:	8 Wire
Color:	Black
Manufacturer Name:	Amp
Manufacturer Part Number:	406372-2
Price:	$0.01
Product ID:	1084179

↳ Quantity [ ] (Add to Cart)
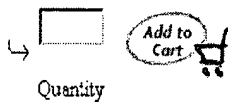
CLG Client Server Technology

Client *Client*

Knowledge Base

e+

Client *Client*
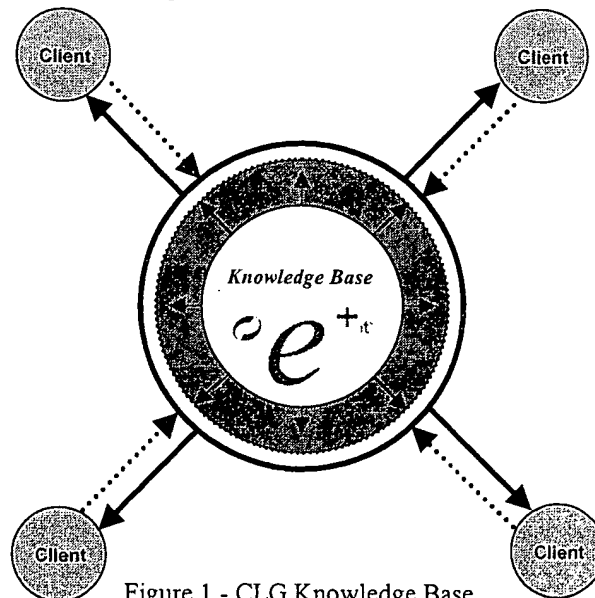
Figure 1 - CLG Knowledge Base

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As customers data is input to the CLG process they will continue to add patterns for their specific product lines (represented by solid lines in Figure 1 above), it will continue to grow (shown by the short dashed lines in Figure 1). The Knowledge Base continues to grow through the use of each client becoming "smarter" and more valuable over time. As each new pattern is built and disseminated, the system becomes more and more automated to the point where very little intervention or new patterns are necessary to complete a data-cleaning project.

As patterns are added to the CLG, the data cleansing process becomes more efficient for similar data. The increases in efficiency protect client investment in upgrading their content and ensures that costs of enriching the data are declining costs.

Common Data Standards

The passing of information between supplier and buyer is not a new practice. Many attempts have been made to provide standards that all businesses can use in the normal course of operations. These standards, however, help to automate the transactions but *do not define the attributes that constitute the supplier's product.* Below are several of the better-known standards that illustrate this problem.

EDI ANSI X.12

One of the earliest and most widely used standards is Electronic Data Interchange (EDI). The American National Standards Institute (ANSI) published an EDI standard, which has been adopted by most EDI vendors. This standard is called X12. (Another widely adopted EDI standard more frequently used in Europe is EDIFACT.) While ANSI X12 specifies the standard format for such business documents as Purchase Order, Request for Quote, and Advanced Shipping Notice, it does not attempt to provide a standard for the item attributes. With regard to product information, it provides only certain fixed-length fields to describe a product. Suppliers are therefore forced to define even their most complex products using a small data field.

Open Buying on the Internet (OBI)

With the widespread availability of the Internet, electronic commerce initiatives have begun to proliferate. In response, Internet related standards have grown up seemingly overnight. These standards are, in many cases, similar to their EDI predecessors because they define the transactions but not the item data. One of the most widely discussed is Open Buying on the Internet or OBI. Although OBI has the potential to facilitate business-to-business commerce on the Internet, it requires the use of EDI-standard documents to conduct some types of information exchange, such as purchase orders. And like EDI, OBI defines only the high-level information rules that are consistent across all transactions.

United Nations Standard Product and Service Classification (UN/SPSC)

The UN/SPSC standard provides for the description of products and services using a ten-digit code. It is structured as a hierarchy of five levels: Segment, Family, Class, Commodity, and Business Functions. At each level, a two-character numerical value is assigned. Rules for classification specify that items should be aggregated with others that have the same function or that are manufactured by the same process. If those two criteria cannot be met, than the material from which the item is made serves as the basis for classification.

Although this standard provides for the classification of products, it does not differentiate among the many attributes that a classified product might have. Thus, a ballpoint pen is only a ballpoint pen to the UN/SPSC; it does not have red ink, black ink, a retractable tip, or even a specific manufacturer.

Extensible Markup Language (XML)

XML, a specification spearheaded by the World Wide Web Consortium (W3C), is really a system for defining other languages that describe specific types of data. The W3C says XML is "a common

syntax for expressing *structure* in data." Structured data is tagged according to its content. This differs from HTML, which is syntax for expressing the *format* of data. In HTML, data is tagged as to how it should be displayed by your Web browser--<B> for bold, <I> for italics, etc. In XML, data would be tagged with something that gives it meaning—for example, <list price> for the list price of an item, or <manufacturer> for the name of the company that makes the product. XML provides the framework that enables a supplier to create attribute/value pairs for each product in its catalog. To date, the benefits of XML have been unrealized by eCommerce companies, which have only utilized XML to define the highest level of information exchange. Product-specific data has been largely ignored, because no one has yet presented a mechanism to define products consistently by attributes -- until now.

XML with CLG Extensions

As XML has developed, the standards bodies that oversee its development believe that unique formats in the form of a Document Type Definitions (DTD) are necessary for each classification of products. This has lead many eCommerce companies to develop DTDs that define their unique format that the XML will take for their applications and with the products they support.

While CLG can support any of these eCommerce DTD's, we believe that a simpler, more effective, single DTD can be created to handle *all* products in *all* classes. In addition to having XML elements for information such as "Part Number" and "Description", the DTD should contain an unlimited

number of element pairs that contain the attributes and corresponding values to describe each item's unique characteristics.

The hurdle to overcome in order to make XML viable is not in the creation of the DTD but in the definition of these attribute/value pairs. CLG is designed to accomplish this. As described earlier in this document, CLG generates this unique attribute value pairing automatically and exports an XML file.

Our CLG Technology Brings Results

Without translating product data into a language that a buyer can readily understand, a supplier's eCommerce initiative will ultimately fail, no matter how much money is spent on the "look and feel".

In addition, as more and more corporations move to application driven purchasing, suppliers will be faced with more and more requests for product data in a wide variety of formats from a growing number of purchasing application vendors. Suppliers can no longer create a new project for each new request. They must have some way to clean their data *once* and use it for all of the requests from these vendors. This data must be clean, consistent and flexible.

ePlus Systems CLG provides the language for eCommerce and therefore provides a solution for all of these issues. CLG creates data that can be utilized by <Customer Name> in a variety of ways.

- **To create parametric searching for <Customer Name> eCatalog.**
- **To allow <Customer Name> to enable feature rich product listings in any eCommerce engagement.**
- **To create XML tagged data when required—this is now the emerging industry**
- **standard.**
- **To create better internal customer service applications that are easier to learn**

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- and use.
- Standardizing data reduces errors, cuts costs and increases customer satisfaction throughout the enterprise.

Our Unique History in Delivering Content for Business

ePlus has a long proven track record in the field of eContent for eCommerce. The tools and processes we employ to build catalogs are derived from a long-standing collaboration of people with materials expertise working closely with technology people. That's the advantage we enjoy, and we feel our tools serve the needs of the people working in the process, not defining the process. Following you will find descriptions of the tools we now use in our content creation and management processes:

Catalog Maintenance Utility:

- Users may add, delete or update products, Images and pricing.
- View and maintenance products in their native (WEB) setting.
- Includes catalog management features of the CLG, maintain Classes and attributes.

Catalog Maintenance

Product Information

Product Description

15.6 oz Appliance White Porcelain Enamel Repair Spray

FEATURES

15.6 oz Appliance White Porcelain Enamel Repair Spray - Repairs Surface Discolorations & Minor Scratches

Field	Value 1	Value 2
Type:	Evaporative Cooler	Porcelain Enamel
Container Type & Capacity:	0.5 oz	15.6 oz
Composition:		$$$
Color:	Tan	White
Finish:	Glaze	$$$
Brand Name:		$$$
Manufacturer Name:	Dial Manufacturing, Inc	$$$
Manufacturer Model:		$$$
Manufacturer Part Number:	5623	$$$
Supplier Name:		Maintenance Warehou
Supplier Part Number:		128718
Cost:	14.79	
Product ID:	769272	

Submit

Main Image File Upload

Browse

Upload Main File

Thumbnail Image File Upload

Browse

Upload Thumbnail File

Catalog Load Utility:

- Loads supplier input files to Catalog Platform, user may assign products to catalog classification structure.

Catalog Load Utility

Class Navigator

- All Classes
  - ePlus MarketPlace
    - Building Supplies
    - Chemicals
      - Acid
      - Chemicals
      - Dye
      - Foaming Acids
      - Gases
    - Consumer Products
    - Electrical
    - Electronics, Computers & Communic
    - Facilities Maintenance
    - Fire and Safety, First Aid
    - Gaskets, Seals, and Packings
    - Handling and Storage
    - Lab and Medical Products
    - Office Products
    - Paint and Protective Coatings
    - Pipe, Valves, Hoses, Tubing and Fi
    - Process Controls, Equipment & Instr
    - Rotating Equipment & Machinery
    - Text Based Supplier Catalogs
    - Tools and Shop Equipment
    - Transportation Equipment

Input File

ProductID	ProjectID	LoadEventID	SupplierSKU	SupplierID	SupplierName
146761	0	0	K6PITB74920	BOI0000	Boise Cascade
146787	0	0	K6PITB74020	BOI0000	Boise Cascade
146788	0	0	K6PITB74015	BOI0000	Boise Cascade
146880	0	0	K6PITB72410	BOI0000	Boise Cascade
146881	0	0	K6PITB72210	BOI0000	Boise Cascade
146905	0	0	K6PITB76015	BOI0000	Boise Cascade
146932	0	0	K6H6036AS	BOI0000	Boise Cascade
146933	0	0	K6PITB74815	BOI0000	Boise Cascade
146941	0	0	K6H7846WS	BOI0000	Boise Cascade
146973	0	8	K6PITB76020	BOI0000	Boise Cascade
146976	0	0	K6PITB74820	BOI0000	Boise Cascade
146977	0	0	K6PITB73720	BOI0000	Boise Cascade
146978	0	0	K6PITB73715	BOI0000	Boise Cascade
146979	0	0	K6PITB73310	BOI0000	Boise Cascade
146980	0	0	K6H7856WS	BOI0000	Boise Cascade
146981	0	0	K6H6640AS	BOI0000	Boise Cascade
4835	0	0	P61485-18-G8	BOI0000	Boise Cascade
4976	0	0	P6060	BOI0000	Boise Cascade
5347	0	0	P6C9555-2-00	BOI0000	Boise Cascade
5580	0	0	P6C9511-2WC	BOI0000	Boise Cascade
5581	0	0	P6C9511-3-WCP	BOI0000	Boise Cascade
5583	0	0	P6L1285-18-00	BOI0000	Boise Cascade
5584	0	0	P6L1285-20-00	BOI0000	Boise Cascade
5639	0	0	P69511-R18-00	BOI0000	Boise Cascade
6666	0	0	P61485-20-G2	BOI0000	Boise Cascade

ePlus

Syndication:

- Define products by Classes, User Groups or Product views and Publish to Multiple user defined formats
- Track Distribution and Changes
- Provides reports on New and Re moved products

Syndication Process Status Monitoring
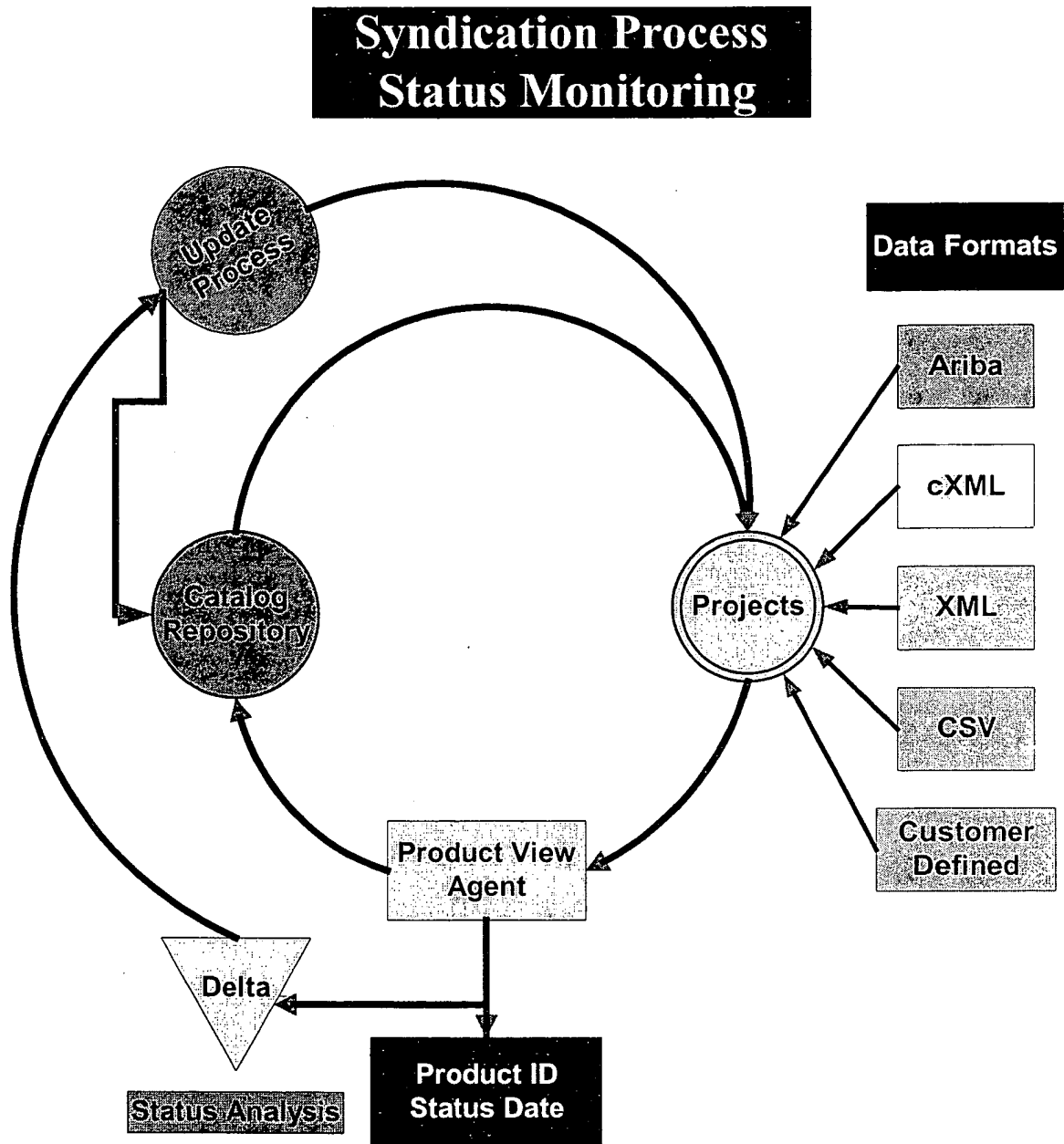
Three Ways to Deal with Content

ePlus Content Management Tools

ePlus Hosted Catalog Content

Content Consumers

ePlus Content Lab

ePlus Hosted Catalog Content

Content Consumers

ePlus Content Management Tools

Content Repository

Content Consumers
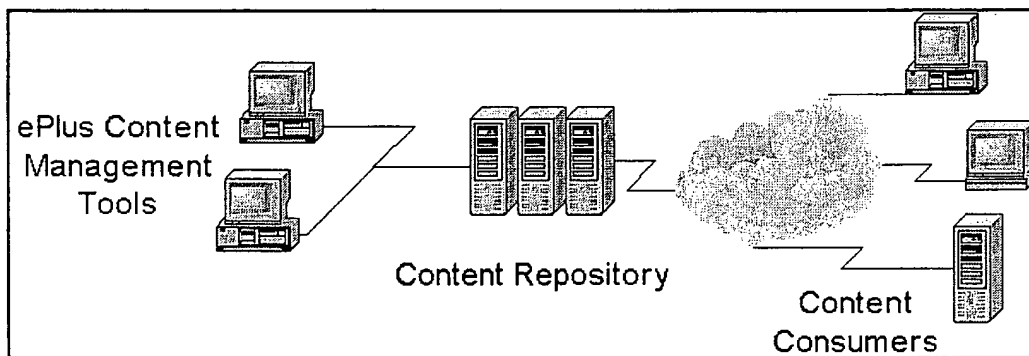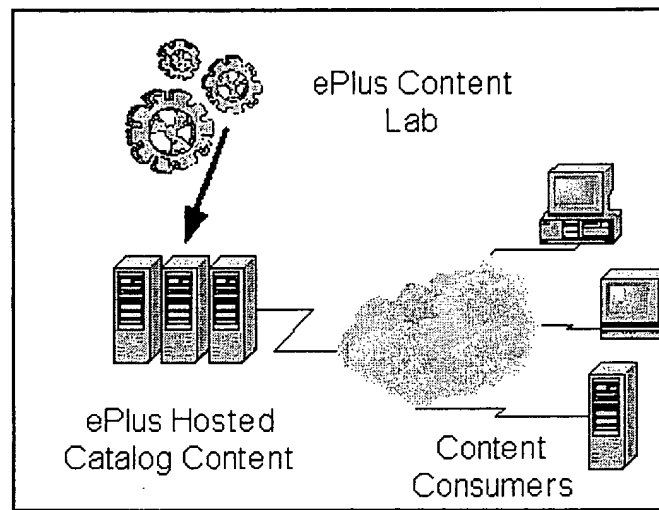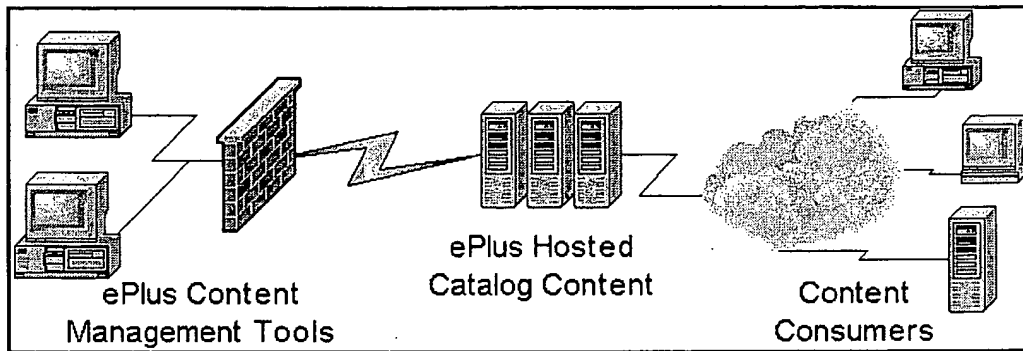
Services

Turn Key Content Solutions:
- ePlus will work with the client to provide a complete *"End to End"* content solution, customized to fit the clients business requirements. We will employ all the resources and technology necessary to create and publish product content that fits the client's business needs.

Supplemental Services:
- ePlus will supplement your existing resources to any level necessary to ensure the success of your content initiatives.

Ready to *"GO"* Content:
- Compare your product library to our 1 million-item Repository, and then reuse the work we have already performed and bring forth the most intuitive content possible at the lowest cost in the industry.
- Build your Marketplace offering from our repository and process orders immediately.

Catalog Hosting:
- 24/7 operations and support.
- Maintenance services on content and catalogs.
- Syndication at clients request to all formats XML, CSV, Ariba, C1, customized or printed catalogs and marketing literature.
- Client connectivity, for QA or Maintenance.

Aggregation Services:
- Contact Manufacturers and Supply sources to retrieve and capture all relevant product information including Descriptions, Images, drawings etc.
- Create data source for future updates and Maintenance of product descriptions.

Electronic File   CD   Paper Catalog

Repository
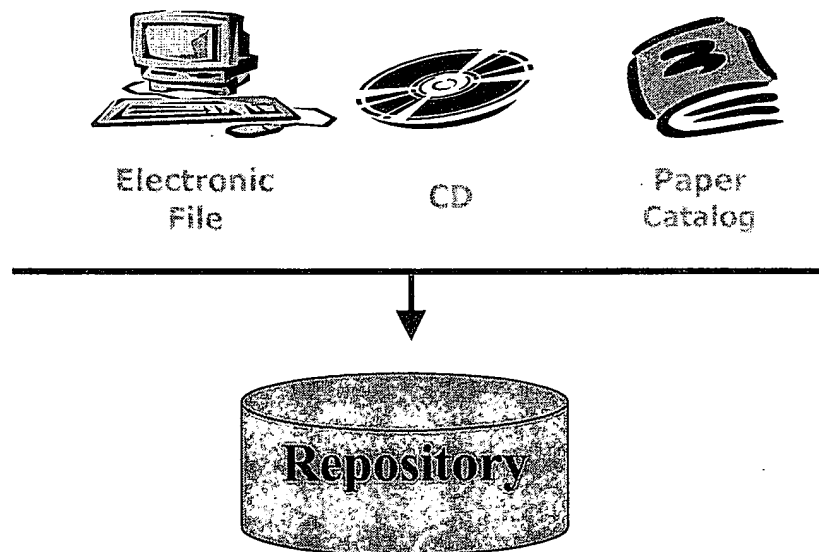
The Optimum Solution for your Company

ePlus's long history of providing *Rich Content and Services to our clients* has taught us the creation of a catalog involves a strong partnership between the client and our services organization. That's why our Services and Catalog Technology is the right tool set for you.

Our software allows the user to aggregate any commodity into an intuitive easily navigate-able catalog using business rules that are right for your business. We provide knowledgeable people with many years of industry experience to help your organization through the entire building process.

→ GO

Catalog
- Building Supplies (103911 items)
- Chemicals (13 items)
- Consumer Products (704 items)
- Electrical (22123 items)
- Electronics, Computers & Communication Equipment (16038 items)
- Facilities Maintenance (3617 items)
- Fire & Safety, First Aid (1840 items)
- Gaskets, Seals, & Packings (253 items)
- Handling & Storage (4699 items)
- Lab & Medical Products (95443 items)
- Office Products (12382 items)
- Paint & Protective Coatings (474 items)
- Pipes, Valves, Hoses, Tubing & Fittings (16077 items)
- Process Controls, Equipment & Instrumentation (412 items)
- Rotating Equipment & Machinery (24467 items)
  - Rotating Equipment & Machinery (24467 items)
    - Air Compressors (48 items)
    - Air Compressors Accessories & Spare Parts (5 items)
    - Bearings (12683 items)
    - Bearings & Power Transmission Equipment (11340 items)
    - Electric Generators Accessories & Spare Parts (1 items)
    - Engine Electric Generators (3 items)
    - Mechanical Lockouts (3 items)
    - Pumps (24 items)
    - Pumps & Manual Operators (2 items)
    - Pumps & Motors (4 items)
    - Pumps Accessories & Spare Parts (16 items)
    - Rotating Equipment Accessories & Spare Parts (338 items)
- Text Based Supplier Catalogs (356278 items)

REFINE SEARCH ○

Building & Infrastructure

Factory/Workshop & Warehouse

Business/Office

Consumer Goods, Medical & Safety Items

Laboratory

Water Treatment & Marine

Transportation & Heavy Equipment
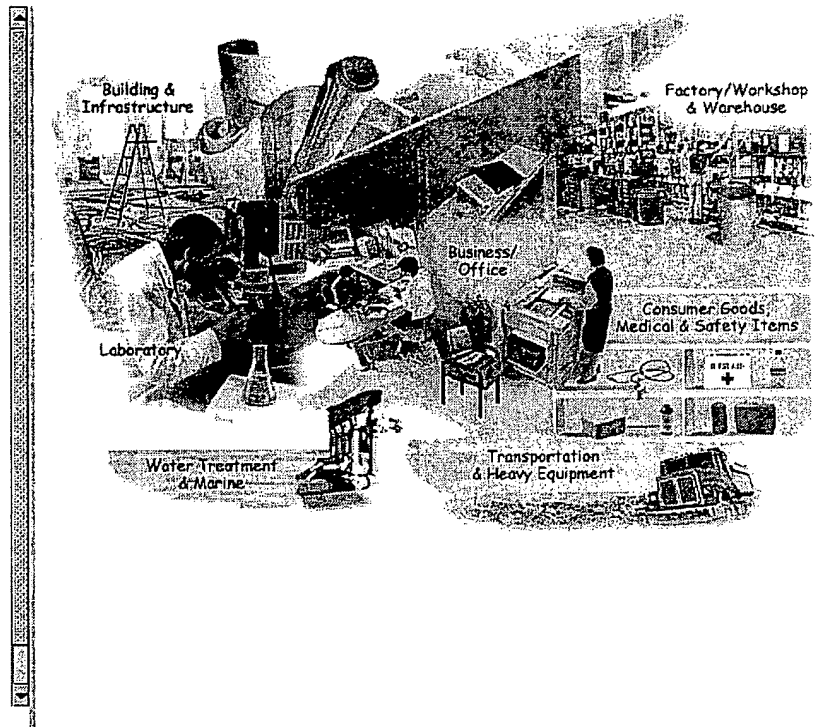
APPENDIX VIII – PRESS RELEASE OF 11/13/01

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ePlus Releases Content+™ Catalog Creation and Management Solution

Content+ is a Powerful Application for Catalog Development, Deployment, and Management For Virtually Any System or Application

HERNDON, VA - November 13, 2001- ePlus inc. (Nasdaq NM: PLUS - news), a leading provider of eContent and business solutions and services, today announced Content+™, a comprehensive suite of software and outsourced services for advanced electronic catalog content production and management.

Developed by ePlus' commodity experts through 8 years of real-world use with ePlus' online marketplaces and customers, this fourth generation of Content+™ enables organizations to automate the creation of their eCatalogs. Unlike many catalog management products, Content+™ programmatically cleanses and classifies raw commodity data, greatly accelerating the creation of enhanced, parametrically searchable catalogs that are required for efficient e-commerce transactions.

"Catalog managers will now be able to read a wide variety of raw content and catalog data-from parts and materials, to accounting records, customer support information, and more," said Ken Farber, President of ePlus Content Services. "Content+ automates the analysis, normalization, and rationalization of data to maximize its integrity for use in all eCommerce applications. We have competed successfully against market leaders like Requisite, and we believe that this product has great market potential now that it is generally available to the public."

Industry experts agree that without accurate content, eCommerce is like looking for a needle in a haystack. "Before it is usable in an eCatalog, catalog content needs to be cleansed, normalized and categorized," said Erica Rugullies, Director at Giga Information Group ["Choosing the Right B2B Catalog Management Solution," June 1, 2001].

Incorporating a knowledge base of over 200,000 business rules and 44,000 commodity and class codes, Content+ uses pattern recognition to interpret free-form text. By recognizing millions of permutations in data and producing standardized values that eliminate duplicate and inconsistent information, Content+ produces highly structured and normalized data elements. The lack of such catalogs has been one of the largest limiting factors in the adoption of e-commerce systems by customers and suppliers, and Content+ provides all of the tools to quickly and cost effectively create and manage online catalogs.

Unlike most competing products, Content+ programmatically cleanses data and classifies products into useable categories, and embedded business rules can be expanded to accommodate any type of incoming data. Customers can add their own rules and classes to reflect the specific needs of their business. The suite is available to suppliers, software solution providers, eProcurement customers, as well Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM) vendors and their customers.

By using Content+, businesses can reduce the time and high cost of manually cleansing data while enabling a platform that can create easily navigable e-Commerce catalogs. The Content+ suite consists of integrated modules, including data cleansing, catalog management and maintenance, export/syndication, catalog hosting and aggregation services. Content+ is part of the ePlusSuite of industry solutions, covering every aspect of business process management - from procuring goods and services, to tracking financial data and managing corporate assets, to outsourcing, fulfillment, content technology, and related services.

More information about Content+ is available at www.eplus.com/content_plus/index.shtml.

About ePlus:

A leading provider of Web-based e-procurement, asset management, financing, leasing, sourcing, and eContent technology and services, ePlus delivers comprehensive and high-value business solutions. The ePlusSuite of products and services, including Procure+, Manage+, Finance+, Service+, Content+, and ePlusMarket, helps businesses dynamically streamline, improve and gain management control. ePlus solutions integrate and automate each aspect of the supply chain process: from requisition to

approval, fulfillment, financing and asset management, delivering the highest return on investment.

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Founded in 1990, the company is headquartered in Herndon, VA and has more than 30 locations in the US. For more information, visit our website at www.eplus.com, call 800-827-5711 or email to info@eplus.com.

"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995: The statements contained in this release, which are not historical facts, may be deemed to contain forward-looking statements. Actual and anticipated future results may vary due to the following risks and uncertainties, including, without limitation, general economic conditions; fluctuations in operating results; its ability to effectively manage future growth, to retain and efficiently integrate our executive management team, and to identify, hire, train and retain, in a highly competitive market, individuals highly skilled in the Internet and its rapidly changing technology; the lack of long-term contracts in certain business units; its ability to enter into and retain its existing, strategic relationships; market acceptance; rapid technological change; a decline in Internet usage and intense competition in its market; its ability to effectively integrate the operational, managerial and financial aspects of future acquisitions; demand and competition for the Company's lease financing and equipment sales and asset management services, and the products to be leased or sold by the Company; the continued availability to the Company of adequate financing including permanent non-recourse and recourse debt, and working capital lines of credit; the ability of the Company to recover its investment in equipment through remarketing; the successful execution of its e-commerce strategy; the amount of equipment ordered, purchased and/or leased by its customers; and other risks or uncertainties detailed in the Company's Securities and Exchange Commission filings. Investors are cautioned that current financial results may not be indicative of future results.

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APPENDIX IX – PRESS RELEASE OF DECEMBER 4, 2001

## ePLUS ANNOUNCES FIRST e-COMMERCE CATALOG CONTENT FRAMEWORK

Accelerates Catalog Development and Deployment for Virtually Any System or Application

HERNDON, VA - December 4, 2001- ePlus inc. (Nasdaq NM: PLUS - news), a leading provider of eContent and eBusiness solutions and services, today announced the general availability of ePlus Content Framework SM, an open and fully extensible schema for the creation and management of eCommerce-enabled product catalogs. By adopting the ePlus Content Framework, any company can quickly create online catalogs organized around a user-friendly table of contents. The ePlus Content FrameworkSM contains over 44,000 pre-defined product classifications, and enables users to match their business requirements by adding to or modifying the existing structure.

ePlus developed the ePlus Content Framework by naming and creating product schemas from real-world experience. "Our extremely rich schema has been exceedingly well received by our customers and partners because of its success at representing products in natural language that all users, no matter what their level of expertise, can easily understand," said Ken Farber, President of ePlus Content Services. "Strong community encouragement and feedback led us to the decision to make this framework available to the broader eCommerce industry. We believe it will revolutionize eBusiness standards by facilitating a smooth and seamless content process for suppliers, manufacturers, third-party vendors and all types of businesses."

The flexibility of the ePlus Content Framework worked to the advantage of Integra Integrated Procurement Solutions, a national provider of maintenance, repair, and operating materials (MRO) as well as specialty products. "Integra wanted to give our customers access to our products using a unique schema we had developed internally," says Jake Fegely, Vice President of Merchandising for Integra. "The schema needed to cover products from thousands of suppliers and include potentially millions of items. Using the ePlus toolset accelerated the mapping of our catalog content in a way that meets our customers' needs and our business requirements at the same time."

Companies entering into eCommerce or converting their business to an enterprise software package need a framework to define their catalogs of products and services. The ePlus Content Framework is a cost effective solution for businesses of all sizes. Compared to internally developed solutions, which must be built from scratch, the ePlus Framework can be easily customized to fit proprietary and legacy data. In contrast, market alternatives that force businesses to adhere to rigid structures actually increase the cost and decrease the utility of those solutions.
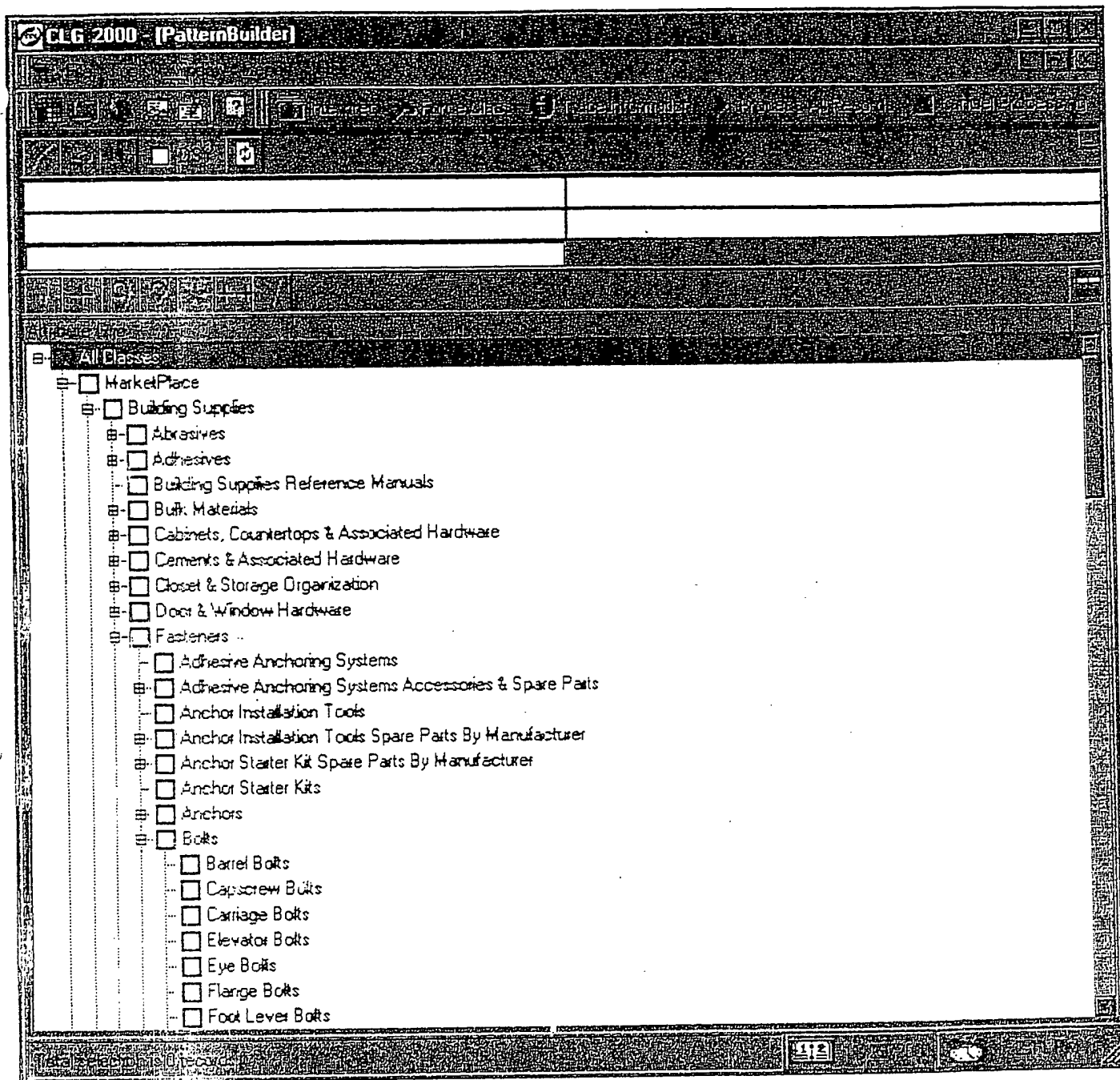
The ePlus Content Framework provides a schema consisting of over 44,000 structured product classifications that facilitate the creation of user-friendly, intuitive, easy-to-navigate catalogs. ePlus Content classifications cover a wide range of commodities, attributes and coding to pinpoint and narrow the search for goods in a wide range of categories - from electrical and automotive equipment, to medical and hazardous material supplies, consumer goods, and more. An example of the product classifications available through the ePlus Content Framework is shown above. The schema simplifies complex product information to enable easy creation of digital catalogs. Along with related management software tools available from ePlus, organizations can cross-reference product data with common terminology and industry standards such as the UN/SPSC or any other pre-developed categorization scheme, ensuring standardized, reusable data.

Relationships between products and the type of domain they are commonly associated with typically are overlooked when building product classification schemas and helping search engines guide users to the products they seek. According to Pierre Mitchell, Research Principal, Enterprise Management Strategies at AMR Research, "Schemas and attributes must be intuitive to buyer[s], whether goods are off-the-shelf or configurable." [The AMR Research Report on E-Commerce Applications, "Content Management Strategies", May 2000]

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For more information about the ePlus Content Framework, contact Rudy Alexander, Vice President Sales, at 704-357-3888 ext. 212.

About ePlus:

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